BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of IP-Enabled Services	WC Docket No. 04-36

COMMENTS OF THE PEOPLE OF THE STATE OF CALIFORNIA AND THE CALIFORNIA PUBLIC UTILITIES COMMISSION

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SUMMARY

California welcomes the FCC's inquiry as timely to determine the appropriate framework that should govern the provision of IP-enabled services, including voice-grade telephony service using IP technology. As the FCC correctly observes, the active migration of customers from conventional telephony service to voice-grade telephony service over IP impacts critical public policies and programs, such as universal service, disability access, access to emergency services, and assurance of basic consumer protection measures. Each of these important policy objectives is embodied in the Communications Act.

The FCC has properly recognized that an examination of the appropriate framework for voice-grade telephony and other IP-enabled services must be considered against the policy objectives of the Act, and how Congress expressly has sought to effectuate these objectives in the language of the Act and under its dual regulatory structure. Specifically, California urges the FCC to consider the following principles inherent in the Act: (1) all customers should have reasonable and affordable access to high-quality voice-grade telephony service; (2) customers who are disabled should have reasonable and affordable access to service that is functionally equivalent to voice-grade telephony service offered to non-disabled customers; (3) customers should have access to emergency services from any provider of voice-grade telephony service which offers its service generally to the public for a fee; (4) customers who purchase voice-grade telephony service from

any provider should enjoy basic consumer protections, including reasonable notice of terms and conditions of service and the safeguard of customer proprietary information; and (5) functionally equivalent service should be treated similarly when provided by those similarly situated regardless of the technology deployed or the facilities used, in order to prevent undue discrimination and regulatory arbitrage.

The FCC must likewise be mindful of Congress' intent to maintain a dual regulatory structure, whereby states play a critical role in effectuating all of the aforementioned public policy objectives of the Act. For voice-grade telephony service over IP, it is both possible and practicable for the states to exercise their authority to realize the Act's policy goals in harmony with the FCC.

Finally, the FCC should exercise its authority under Title II over voice-grade telephony service over IP, and should not forbear from enforcing the provisions of Title II, to ensure that the fundamental policy objectives of the Act are realized.

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The People of the State of California and the California Public Utilities Commission ("California" or "CPUC") hereby submit these comments in response to the Notice of Proposed Rulemaking on IP-Enabled Services ("NPRM") released by the Federal Communications Commission ("FCC") on March 10, 2004 in the above-referenced docket.

I. INTRODUCTION

In this docket, the FCC seeks to determine the appropriate framework to govern the provision of IP-enabled services, consistent with the important public policy objectives that underlie the Communications Act, as amended ("Act"). The NPRM defines IP-enabled services as those services and applications that make use of Internet Protocol ("IP") technology. IP-enabled services include high-speed digital transmission services, such as DSL and cable modem service that provide the last-mile connection between an Internet Service Provider and the end-use

customer.[1] The NPRM thus considers not only the appropriate framework for voice-grade telephony service using IP technology but also for other IP-based services and applications.

Although offered since at least 1995, the FCC observes that the providers of voice service using IP technology in particular are "beginning to challenge traditional telecommunications carriers in residential markets – and even today use IP to transport residential interexchange calls, often unbeknownst to end users." NPRM, ¶ 3. In particular, the FCC notes that facilities-based providers, such as cable operators, wireline carriers, and wireless carriers, are offering or are poised to offer voice-grade telephony service to consumers as a substitute for traditional voice service. Other providers of voice service using IP technology not owning extensive facilities or any facilities include companies like Pulver and Vonage.

Expressly declining to prejudge any issues, the FCC asks broad questions "covering a wide range of services and applications and a wide assortment of regulatory requirements and benefits to ensure the development of a full and complete record upon which [it] can arrive at sound legal and policy conclusions regarding whether and how to differentiate between IP-enabled services and traditional voice legacy services, and how to differentiate among IP-enabled services themselves." NPRM, ¶ 5.

Among other things, the FCC asks how, if at all, it should categorize various IP-enabled services, and whether it is necessary to apply existing

[1] NPRM, ¶ 1, n.1

regulatory requirements to further critical national policy goals. Adopting a functional approach, the FCC seeks comment, among other things, on the degree to which the service is functionally equivalent to traditional telephony and the degree to which the service is viewed as a substitute for traditional telephony. The FCC also asks whether it should differentiate among various aspects of a particular offering, including the underlying transmission facility, the communications protocols used to transmit information over that facility, or the applications used by the end user to send and receive information. The FCC further asks whether it should distinguish services on the basis of common v. private carriage, by technology, or by primary v. non-primary line.

The FCC also seeks comment on the appropriate legal and regulatory framework that should govern the provision of IP-enabled services, taking into account recent judicial decisions. Among other things, it asks how IP-enabled services are classified under the 1996 Act (information service v. telecommunications service), and whether IP-enabled services are subject to both federal and state jurisdiction or exclusively federal jurisdiction.

In addition, the FCC seeks comment on whether specific regulatory requirements embodied in the 1996 Act should apply to IP-enabled services. These include access to 911/E911 service; disability access; universal service obligations; consumer protection measures; nondiscriminatory access by customers to their choice of services; and law enforcement and national security measures. The FCC also seeks comment on the extent to which access charges

should apply to IP-enabled services, stating that as a policy matter any service provider that uses the public switched telephone network ("PSTN") should be subject to similar compensation obligations regardless of whether the traffic originates on the PSTN, an IP network, or a cable network. NPRM, ¶ 61. The FCC further asks whether IP-enabled services over wireless cable platforms necessitate different treatment in light of specific statutory provisions governing wireless and cable.

Finally, the FCC invites comment on the implications of its decisions in this docket on rural carriers and numbering resources.

In considering the above issues, the FCC has expressly incorporated the records in the pending AT&T, Vonage and Level 3 cases. Parties may also incorporate by reference their comments in other pending federal proceedings, including the universal service proceedings.

California welcomes the FCC's inquiry as timely. Like the FCC, California is particularly concerned with how the dynamic growth rate of voice-grade service over IP, caused by the active migration of customers from conventional telephony service to voice service over IP, impacts critical public policy objectives embodied in the Communications Act. As the FCC acknowledges, voice-grade service over IP mimics conventional voice-grade telephony. NPRM, ¶ 3 n.7.

In these comments, California will discuss the basic principles, embodied in the purpose, structure and language of the Communications Act and FCC decisions implementing the Act, that should guide the FCC's consideration of the

appropriate treatment of voice-grade telephony service over IP. California has previously stated in comments before the FCC that transmission services using IP technology that provide the last mile high-speed link between an ISP and the end use customer are Title II common carrier services and should continue to remain subject to Title II. California incorporates and attaches those comments here.[2]

II. BACKGROUND

Over twenty five years ago, the FCC recognized that dynamic technological advances were taking place in the communications network and that services unheard of in 1934 were rapidly being developed due to the confluence of communications and computer technologies. In response, the FCC adopted the Computer Inquiry regulatory framework, under which the FCC distinguished between basic transmission services, including real-time voice-grade telephony service, and enhanced services.[3] The FCC continued to regulate transmission services under Title II of the Act, and left largely unregulated enhanced services. In addition, the FCC required those who own or operate the underlying

[2] In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities (Wireline Broadband Inquiry), CC Docket No. 02-33, Comments of the People of the State of California and the California Public Utilities Commission (filed May 3, 2002) (Attachment 1); In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, Comment of the People of the State of California and the California Public Utilities Commission (filed June 17, 2002) (Attachment 2).

[3] In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384, ¶¶ 100-101 (1980), aff'd Computer & Communications Industry Ass'n, Inc. v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983) (regulatory framework that distinguishes basic transmission services and enhanced services "allows providers of basic services to integrate technological advances conducive to the more efficient transmission of information through the network. . .")

transmission facilities or services over which enhanced services are provided must offer these transmission facilities or services on a common carrier basis.[4]

Under this framework, major technological advances in the public network and signaling protocols have evolved to provide basic transmission services and innovative enhanced services. These include the replacement of analog Frequency Division Multiplexing with digital Time Division Multiplexing (TDM) transmission. Similarly, manual switching methods gave way to circuit-based protocols and newer packet switching protocols that have evolved from frame relay to Asynchronous Transfer Mode technologies, and now to IP technologies that integrate voice, data and video communication networks. However, while the technology and facilities used to deliver services dramatically changed throughout the years, the basic nature of the service as defined under the Communications Act did not change.

The FCC's Computer Inquiry regulatory framework was incorporated into the Telecommunications Act of 1996.[5] Among other things, Congress distinguished between telecommunications services and information services, which generally track the distinction between basic services and enhanced services under the Computer Inquiry framework.

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[4] Id.

[5] In re Federal-State Joint Board on Universal Service, Report to Congress, 13 FCC Rcd 11501, ¶ 45 (1998) ("Report to Congress).

The FCC has recognized that the technology underlying these services would continue to develop, such that "new means of providing telecommunications service may emerge."[6] Voice service using Internet Protocol ("VoIP") technology is the newest means of providing voice-grade telephony service that is slated to eventually replace voice service that relies on earlier-developed transmission protocols, switching technologies, and public network facilities. When offered to mass market customers, voice-grade telephony service using Internet Protocol transmits a real-time voice message by converting the voice message into digital electronic packets, and then sending the packetized voice over the public network to its intended destination. So long as the subscriber to voice service over IP has broadband transport service, usually either DSL or cable modem service, the subscriber may call any other customer connected to the public network like conventional voice-grade telephony service, whether or not the customer called has broadband service.

Internet Protocol itself is not a service, but a means of transmitting a

[6] Report to Congress, 13 FCC Rcd 11501, ¶ 101. Vonage itself acknowledged that "there may be telecommunications services that can be provisioned through the Internet." Vonage Petition for Declaratory Ruling, WC Docket No. 03-211, at 19. California has filed comments in In re Vonage Holdings Corporation, WC Docket No. 03-211 maintaining that Vonage's offer of a ubiquitous, real-time voice telephone service for a fee to the public is a telecommunications service within the meaning of the Telecommunications Act of 1996.

service, like earlier generation protocols such as TDM and single dedicated circuits used to deliver voice grade telephony service over the public network.[7] Voice telephony over IP is transmitted via packet switching technology. Packet switching technology, around for more than 20 years to transmit data, is the latest switching technology used to deliver voice service over the public network. Other switching technologies for delivering voice messages over the public network include Ethernet and circuit switching technology. Once packetized, the live voice call using IP typically travels over fiber network facilities, which are the same fiber facilities that may be used to carry voice-grade telephony using the TDM protocol. Put another way, no fiber networks have been built just for IP-enabled services.

As noted, voice-grade telephony service using IP technology has been available since 1995.[8] Prior to that time, however, incumbent local exchange carriers ("ILEC"), competitive local exchange carriers ("CLEC"), and cable carriers have utilized IP technology to carry traffic over their backbone networks. Voice-grade telephony service and other services using IP technology have

[7] Signaling information may be transmitted over (1) a circuit/channel – a transmission path for a single voice or data service, or (2) a carrier system – where one or more channels of information are processed, converted to suitable format and transported to the proper destination. The concept of multiplexing was introduced with the introduction of carrier systems. Multiplexing is the process of transmitting two or more individual signal channels over a common path. Frequency Division Multiplexing (FDM) and Time Division Multiplexing (TDM) are two types of carrier systems. The first type of multiplexing was the analog FDM process, which segments signals into separate channels, stacks them and transports them simultaneously onto a single path. In contrast, the TDM process, introduced in 1962, combines and sends several digital signals sequentially onto a single path.

[8] NPRM, ¶ 11.

received heightened attention because in recent years carriers have extended their use of IP technology to the end points of the public network, or the last mile connection between the carrier and its customers.[9]

In its NPRM, the FCC defines VoIP service to include a real-time, voice service that mimics traditional telephony. NPRM, ¶ 3 n.7. Indeed, many companies that market VoIP service to the general public expressly advertise their service as a replacement for, or alternative to, traditional voice-grade telephony service, and directly compete with telecommunications carriers which offer conventional voice service.[10]

Existing providers of conventional voice-grade telephony service are also actively marketing voice-grade telephony over IP in direct competition with their own conventional voice-grade service offerings. Currently, both SBC and Verizon, the two largest incumbent local exchange carriers in California, are actively migrating their customers to voice-grade telephony and other services that

[9] In its comments in RM 10865 concerning the application of CALEA to VoIP service, the Attorney General of the State of New York at 17 n.48 described the various forms of VoIP telephony currently in place: Pulver.com is at one end of the spectrum, where users communicate only with each other using broadband connections, and users never intersect with the public switched telephone network. Vonage permits users to call anyone on the public switched network by converting the voice from analog to digital format (or vice versa) via a gateway provided by a CLEC. Carriers like Cablevision offer another type of VoIP service, which transmits calls using IP format over a coaxial broadband network, and then hands off the call to a CLEC for transmission in non-IP format. At the opposite end from Pulver is a carrier like USA DataNet, which requires customers to dial an access phone number and then translates the call into IP format for transmission, and then converts it back to non-IP format at the destination.

[10] See, e.g., www.vonage.com (VoIP service is "the same or better service as [a] telephone company"); www.packet8.com (VoIP service is "a cost-effective and feature-rich alternative to traditional telephone service); www.nuvio.com (VoIP service "is a new voice service that can replace your current telephone line from the telephone company); www.att.com (VoIP service "works like a phone only better.").

use IP technology. Verizon in particular recently announced its intent to invest $2 billion to upgrade its traditional wireline network to Internet Protocol technology.[11] Cable companies are also actively upgrading customers to voice and other services using IP technology. In California, for example, Time Warner has filed an application to offer VoIP telephony service to its residential customers as a CLEC.[12]

In California, only one in four customers who have broadband access actually have a choice between DSL service and cable modem service upon which VoIP service depends.[13] As a result, most California customers will not have a choice of VoIP service if they purchase it from a facilities-based provider.[14] Customers will, however, have a choice of VoIP service from non-facilities-based providers so long as DSL transmission service remains a common carrier service,

[11] Press Release: "Verizon Outlines Leadership Strategy for Broadband Era; Announces Major New 3G Mobile Data and Wireline IP Network Expansions (January 8, 2004) (posted at http//newscenter verizon com/proactive/newsroom/release vtml?id=83234 & PROAC). Verizon Wireless has also announced its intent to invest $1 billion to upgrade to the next-generation technology. See Verizon Wirless Plans $1 Billion High-Speed Upgrade, Washington Post com (January 8, 2004).

[12] CLECs are very lightly regulated in California. The CPUC routinely grants applications from CLECs without hearing, and does not require review and approval of the carrier's rates for service.

[13] The Status of Telecommunications Competition in California, Second Report for the Year 2002 at 32.

[14] See California's Comments in Wireline Broadband Inquiry at 32-35 (describing broadband market in California). A customer's choice among various broadband technologies (DSL, cable, satellite) is dictated by what is actually offered in his or her area. In re Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and American Online, 16 FCC Rcd 6547, ¶ 74 (2001).

and cable modem service is treated similarly in accordance with judicial decisions.[15]

The Telecommunications Division of the CPUC has projected that, given the dynamic rate of VoIP penetration in California, ten percent of cable voice-grade telephony service,[16] ten percent of voice-grade telephony service for business customers of the incumbent local exchange carriers ("ILEC"), and five percent of voice-grade telephony service for ILEC residential customers will be provided using IP technology by 2008. Based on these projections, VoIP service will account for about 40 to 43 percent of total intrastrate revenues in California by that year. This amount represents half of the nearly $1 billion funding base for the five state-mandated universal service programs in California.[17]

To date, voice-grade telephony service using IP technology that is designed and advertised to the public as a replacement for conventional voice-grade service

[15] AT&T v. City of Portland, 216 F.3d 871 (9th Cir. 2000); affirmed Brand X Internet Services v. FCC, 345 F.3d 1120 (9th Cir. 2003), rehg. denied, mot. for stay of mandate granted. See California Comments in Wireline Broadband Inquiry at 10-42 (DSL service is a telecommunications service under the Act, and the FCC should not forbear from regulating it as such); California Comments in In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, filed June 17, 2002 (FCC should not forbear from regulating cable broadband transmission service as telecommunications service).

[16] According to the Department of Justice, based on the most recent data on local telephone competition released by the FCC, "cable telephony lines constituted in June 2003 about 11 percent of switched access lines provided by [CLECs]," and "[t]here is every reason to believe that percentage will increase." Joint Pet. for Expedited Rulemaking, RM 10865 (Mar. 10, 2004) at 18 n.41.

[17] CPUC Order Instituting Investigation 04-02-007, filed February 11, 2004. A copy is attached hereto (Attachment 3).

has remained exempt from any regulation. However, in light of the projections of dramatic growth of voice-grade telephony service over IP in the next four years, and the profound impact of such growth on state revenues, California has opened an investigation to address the impact of exempting this service from statutory requirements that otherwise apply to traditional voice-grade telephony service.[18] These include requirements for funding universal voice telephony service to low-income customers and rural customers, providing emergency 911 service to customers, and ensuring access by hearing and speech impaired customers to functionally equivalent voice telephony service available to non-disabled customers. Other requirements include adherence to basic consumer protection provisions, such as reliable service in the event of power outages, reasonable notice of termination of service, and protection of confidential customer information.[19]

In its NPRM, the FCC acknowledges the dramatic growth rate of VoIP traffic, particularly by facilities-based providers. NPRM, n.34. One can therefore expect that exempting voice-grade telephony service over IP from all regulatory oversight will have similar profound impacts in the very near future on the same fundamental public policies of universal service, disability access, access to

[18] See n.17 supra.

[19] NPRM, ¶ 71. For example, like the FCC, the CPUC requires that a telephone bill for voice telephony service be clear and plainly identify and describe the services, all charges, and the terms and conditions of service. The CPUC similarly restricts the disclosure of customer proprietary information by telephone companies in recognition of the "unique position [that telecommunications carriers have] to collect sensitive personal information" about their customers. Id.

emergency services and consumer protection embodied in the Communications Act of 1934, as amended. The FCC's inquiry into the appropriate framework that should govern the provision of IP-enabled services, including voice-grade telephony service using IP technology, is thus timely and prudent.

As the FCC recognizes, an examination of the appropriate framework for voice-grade telephony and other IP-enabled services must be considered against the purposes of the Act, and how Congress expressly has sought to effectuate these goals in the language of the Act and under its dual regulatory structure. At the same time, as Commissioner Adelstein correctly observed, "[the FCC] can't afford to just sit back and watch" given how far and fast voice over IP service has already developed, and "recognizing that it's aimed at the core voice telecommunications service."[20] To the contrary, it is critical to take steps to ensure the continued viability of universally available and affordable voice-grade telephony service, the ongoing safety and security of customers, and the preservation of basic consumer protections in light of the legal framework and regulatory mechanisms currently in place.[21]

[20] Remarks of Jonathan S. Adelstein at 5, OPASTCO's 41st Annual Winter Convention (January 19, 2004).

[21] As the FCC notes, it is currently considering in separate dockets revisions to its existing framework for intercarrier compensation and federal universal service support.

III. PRINCIPLES TO GUIDE HOW VOICE TELEPHONY SERVICE USING IP SHOULD BE TREATED UNDER THE ACT

The following principles that inform the Communications Act, as amended, should guide the FCC's consideration of the appropriate framework that should govern the provision of voice-grade telephony service using Internet Protocol technology:

(1) All customers should have reasonable and affordable access to high-quality voice-grade telephony service.

(2) Customers who are disabled should have reasonable and affordable access to service that is functionally equivalent to voice-grade telephony service offered to non-disabled customers.

(3) Customers should have access to 911 emergency services from any provider of voice-grade telephony service which offers its service generally to the public for a fee.

(4) Customers who purchase voice-grade telephony service from any provider should enjoy basic consumer protections, including reasonable notice of terms and conditions of service and the safeguard of customer proprietary information.

(5) Functionally equivalent services should be treated similarly when provided by those similarly situated regardless of the technology deployed or the facilities used, in order to prevent undue discrimination and regulatory arbitrage.

The FCC's consideration of the appropriate framework for the treatment of IP-enabled services, including voice-grade telephony service using IP technology, must be addressed with these principles in mind, consistent with the purpose, structure and language of the Act.

A. Purpose and Structure of the Act

Chairman Powell has recognized that the migration to VoIP services "cannot be complete or successful if there are portions of our population left behind. The availability of voice service to all Americans will continue to be vital to the success of our nation."[22] Indeed, seventy years ago, Congress identified the policy of universal service – access by all Americans to affordable voice telephony service on reasonable terms and conditions – as the touchstone of the Communications Act. In defining the Act's purpose, Congress intended not only to promote "nationwide, efficient communications service," but also that such communication service be made "available, so far as possible, to all people of the United States" on reasonable terms and conditions.[23]

To ensure the realization of this fundamental goal, Congress incorporated the principle of common carriage into the statute – the notion that those who hold themselves out as providing an essential service to the public for a fee, like basic voice telephony service, are obligated to provide customers with reasonable and affordable access to that service no matter where they live, how much they earn, or how able-bodied they may be.[24]

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[22] Written Statement of Michael K. Powell, Before the Committee on Commerce, Science, and Transportation, United States Senate, February 24, 2004 at 10.

[23] 47 U.S.C. §§ 151, 157. Unless otherwise specified, all statutory references are to the Communications Act of 1934, as amended.

[24] 47 U.S.C. §§ 222, 225, 254, 255. Congress gave the FCC discretion to require other providers of services to support universal service goals. 47 U.S.C. § 254.

As a corollary to universal service, Congress embodied two other fundamental policy goals in the Act – that customers have access to emergency services via their voice transmission service to ensure public safety and security, and that customers enjoy basic consumer protections governing voice service, including reasonable notice of terms and conditions of service, reasonable notice of service termination, preservation of consumer privacy, and truth in billing.[25]

To achieve these key policy goals, Congress structured the Act so that both the FCC and the states would determine the appropriate regulatory framework for voice-grade telephony service nationally and locally, respectively. In particular, in § 253(b) Congress made clear that, in removing barriers to entry for interstate or intrastate telecommunications service, "[n]othing … shall affect" the ability of the state to adopt "requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers," so long as such requirements are competitively neutral and consistent with the Act's universal service provisions.

[25] 47 U.S.C. §§ 201, 202, 615. In particular the Wireless Communications and Public Safety Act of 1999 (911 Act) requires the FCC to "encourage and facilitate the prompt deployment of a seamless, ubiquitous, and reliable end-to-end infrastructure for public safety communications," and "to support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs…" The FCC also acknowledged that the "states have broad powers to adopt requirements regarding E911." In re Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling System, 18 FCC Rcd 25340, ¶ 53 (2003). The 911 Act is applicable to both wireline and wireless service. 47 U.S.C. § 251(e)(3).

In several other provisions of the Act, Congress reaffirmed its intent that the states, as well as the FCC, are charged with effectuating the Act's purposes. These provisions include §§ 254(b)(5) & (f) & (h) & (k) governing universal service;[26] § 225(b)(1) governing access by the hearing and speech impaired to voice transmission service; and § 615 governing access to emergency services.[27] Congress further provided in section 706(a) that both the FCC and the states would encourage the deployment of new technologies and services.[28]

Two other principles embodied in the Act that are designed to further the Act's purposes are also relevant to this proceeding. The first principle is that those who provide "telecommunications services," as expressly defined in the Act, must offer those services on reasonable terms and conditions and on a nondiscriminatory basis.[29] Historically, both state and federal regulators have required companies that provide real-time, voice-grade telephony service to the general public for a fee to offer the service on reasonable terms and conditions, including billing, service termination and privacy provisions, and to offer the service without discrimination to end-use customers. This requirement has

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[26] To be sure, Congress intended that "States shall continue to have the primary role in implementing universal service for intrastate service" and that "[s]tate authority with respect to universal service is specifically preserved under new section 254(f)." H.R. Conf. Rep. 104-458 at 128, 132 (1996).

[27] See In re Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling System 18 FCC Rcd 25340, ¶ 54 ("Congress recognized the role that the states play when it required the Commission to 'encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs based on coordinated state plans …'")

[28] Section 706 is reproduced at the note to 47 U.S.C. § 157.

applied whether the voice-grade telephony service is offered by wireline companies (both incumbents and competitive local exchange carriers), by wireless companies, or by cable companies.

The second principle is that the Act is technology neutral.[30] The nature of a service depends on whether it meets the particular definitional sections of the Act, not on the technology used to provide the service or the facilities used to deploy it. Under this principle, those similarly situated who provide functionally similar services are treated similarly, and no particular technology is favored or disfavored.[31] Thus, unless Congress has stated otherwise, regulators have drawn no distinctions in voice-grade telephony service based on the technology deployed or the facilities used to provide it.[32]

B. Definitions Under the Act

In order to determine the nature of IP-enabled service, including voice, one must first turn to the service definitions that Congress prescribed under the Act. Currently, wireline, wireless and cable providers which offer real-time voice-grade telephony service generally for a fee to the public are offering a

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[29] 47 U.S.C. §§ 201, 202.

[30] 47 U.S.C. § 153 (46); section 706.

[31] See Wireline Broadband Inquiry, 17 FCC Rcd 3019, ¶ 7 ("We believe the statute and our precedent suggest a functional approach, focusing on the nature of the service provided to customers, rather than one that focuses on the technical attributes of the underlying architecture")

[32] In contrast, regulators have distinguished between providers based on whether or not they own or operate facilities to provide telecommunications services. Regulators have also distinguished between dominant and non-dominant carriers.

"telecommunications service" as "telecommunications carrier[s]" within the meaning of §§ 153(43), (44) & (46) of the Act.

In § 153(43), "telecommunications" is defined as "the transmission, between or among points, specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." "Telecommunications services" in turn are defined in § 153(46) to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." Under § 153(44), a "telecommunications carrier" means "any provider of telecommunications services" other than aggregators. A "telecommunications carrier shall be treated as a common carrier … only to the extent that it is engaged in providing telecommunications services."[33] Thus, to the extent that wireline, wireless, and cable providers offer voice service, that service is regulated as a common carrier service.

Carriers may also offer "information services." These are defined under § 153(20) of the Act as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications …" The general offering of voice-grade telephony service to the public does not constitute an information service, because as the FCC long ago recognized, and as confirmed by judicial decision, voice-grade telephony service is a transmission service where the end user chooses

where the call begins and ultimately ends, and where the end user controls the form (live voice) and content (the voice message) sent and received.[34] Whatever route the call takes until its final destination, and whatever technology is used to route the call, are completely transparent to the end user. From the standpoint of the caller and called party, the voice communication is sent just as it is received, without any change in the content of the message (i.e., what is said) or in its form. (i.e., how it is said).

Wireline, wireless and cable providers typically combine their offering of voice-grade telephony service with enhanced functionalities that constitute information services, such as voice mail, when marketing their services to the general public. The Act, however, attaches no legal significance to that practice.[35] To the contrary, in § 153(44), Congress expressly recognized that common carrier requirements apply only to the extent that a carrier is engaged in providing telecommunications services.[36]

The FCC similarly explained to Congress that the combination of telecommunications services, such as voice-grade telephony service, with information services does not transform the telecommunications services into

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[33] Id.

[34] California v. FCC, 905 F.2d 1217, 1224-25 (9th Cir. 1990); In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384, 420 (1980).

[35] AT&T v. City of Portland, 216 F.3d at 871; Brand X Internet Services v. FCC, 345 F.3d at 1136 ("Nothing in the definition of section 153(46) suggests that telecommunications must be priced and offered separately in order to qualify as a "telecommunications service."

[36] Brand X Internet Services v. FCC, 345 F.3d at 1137.

information services.[37] Thus, a real-time voice-grade telephony service marketed to the general public does not lose its character as a telecommunications service simply because it is bundled with information services, such as voice mail or itemized billing.[38] "…[F]unctionally, the consumer is receiving two separate and distinct services."[39] The FCC explained:

> [I]f a reseller offers basic voice-grade telephone service with Internet service for one flat monthly fee, the fact that the reseller provides an enhanced service with a basic service for a single price does not render the basic voice service an enhanced service. In that instance, the enhanced service is not combined with the basic service into a single enhanced offering because, functionally, the consumer is receiving two separate and distinct services, voice-grade telephone service and Internet service.[40]

Recently, the FCC confirmed that AT&T's offer of a ubiquitous, real-time voice service using IP technology is a telecommunications service subject to the requirements governing common carrier service, including the payment of access charges.[41] In doing so, the FCC stated that AT&T's voice-grade service over IP is not the "kind of use of the Internet or interactive services" that Congress sought to

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[37] Report to Congress, 13 FCC Rcd 11501, ¶ 60 (1998) ("It is plain … that an incumbent local exchange carrier cannot escape Title II regulation of its residential local exchange service simply by packaging that service with [an information service] like voice mail.")

[38] Second Computer Inquiry, 77 FCC 2d 384, ¶ 98.

[39] In re Federal-State Joint Board on Universal Service, 13 FCC Rcd 5318, ¶ 282 (1997) (rejecting notion that "combining an enhanced service with a basic service for a single price constitutes a single enhanced offering)."

[40] Id. at n.827.

[41] In re Petition for Declaratory Ruling, Order, FCC 04-97 (released April 21, 2004). AT&T itself characterized its voice over IP service as a telecommunications service.

single out for exceptional treatment."[42] It therefore does not qualify as an "information service" under § 153(20).[43]

Wireline, wireless and cable providers also routinely convert an end user's voice service from analog protocol to digital protocol formats to permit the delivery of the live voice message to the end user's intended destination. Congress made clear, however, that protocol conversion does not transform the voice-grade telephony service into an information service. To the contrary, Congress exempted from § 153(20) any use of "[a] capability for …processing …information" "for the management, control, or operation of a telecommunications system or the management of a telecommunications service."[44] The FCC has previously acknowledged this exception.[45] The exemption in § 153(20) also includes equipment or other "capability" that is used

[42] Id., ¶¶ 3, 17.

[43] Id.

[44] 47 U.S.C. § 153(20).

[45] See Report to Congress, 13 FCC Rcd 11501, ¶ 89 n.188 (voice transmission service from the user's standpoint involves no net change in form or content of a real-time voice message, notwithstanding routing and protocol conversion within the network.); accord, Independent Data Communications Manufacturers Ass'n, Inc. Mem. Opin. and Order, 10 FCC Rcd 13717, ¶ 14 (1995) (communications between the subscriber and the network for call routing are not considered information services) In addition, protocol conversions necessitated by the introduction of new technology are outside the ambit of the enhanced services definition. Id., ¶ 15. See also Second Computer Inquiry, 77 FCC 2d 384, ¶ 95 ("Use internal to the carrier's facility of compacting techniques, bandwidth compression techniques, circuit switching, message or packet switching, error control techniques, etc. that facilitate economical, reliable movement of information does not alter the nature of the basic service. . . In offering a basic [voice] transmission service, therefore, a carrier essentially offers a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer-supplied information. It is clear that in defining a basic service in this manner, we are in no way restricting a carrier's ability to take advantage of advancements in technology in designing its telecommunication network."); In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 FCC Rcd 24011 (1998) at n.57 (same).

"for the management, control or operation of a telecommunications system for the management of a telecommunications service." Thus, the use of particular customer premises equipment, whether it be a computer, adapter, or some other hardware or software, to originate or terminate voice-grade telephony service likewise does not convert a telecommunications service into an information service.[46]

Significantly, the nature of a service under the Act's definitions turn on its functionality from the perspective of the end-use customer, not the network manager or other entity.[47] Specifically, in § 153(43), "telecommunications" means the transmission, between or among points *specified by the user,* of information of *the user's choosing* …" (emphasis added). Similarly, in § 153(20), an information service means the "offering of a capability" to a user *to enable the user* to generate, acquire, store, transform, or process, retrieve utilize or make available information. In both cases, it is what the *user* does, or does not do, with the information that is dispositive of how the service is defined under the Act.

Based on the Act's definitions, conventional voice-grade telephony service offered by wireline, wireless, and cable companies has always qualified as a

[46] Similarly, whether that capability is located within the network or in CPE on the customer's premises does not change the nature of a voice-grade telephony service as a telecommunications service.

[47] The FCC has likewise recognized that the nature of service is viewed from the functional standpoint of the end user. Report to Congress, 13 FCC Rcd 11501, ¶ 89. See also Statement of Chairman Powell, In re AT&T Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges, FCC 04-976, (April 21, 2004) ("[I]t is important to be guided by the perspective of consumers that are purchasing service, in determining how a service should be understood.")

"telecommunications service" because the service does not provide the subscriber with additional, different, or restructured information, or require subscriber interaction with stored information. From the subscriber's perspective, the subscriber transmits the live voice message between or among points that he specifies, without change in the message's form or content.

To the extent that services using IP technology enable the end-use customer to control the form or content of the information transmitted, and to specify the points at which the customer's chosen information is sent and received, those services would likewise qualify as telecommunications services under the Act if offered to the public for a fee.[48]

C. The Act is Technologically Neutral

The Communications Act is technologically neutral. Congress provided that distinctions in service depend solely on whether they meet the definitional sections of the Act. Congress further made clear that distinctions in services, based on the facilities used or the technology deployed, are not relevant for purposes of defining telecommunications services, including advanced or high-speed telecommunications services. Specifically, in § 153(46), Congress stated that a "telecommunications service" is the offering of telecommunications for a fee to the public "regardless of the facilities used." In section 706(c)(1), Congress clarified that "advanced telecommunications capability" "is defined "without

[48] As discussed in the CPUC's comments on Vonage's petition before the FCC, Vonage's voice-grade telephony service qualifies as a telecommunications service. In re Vonage Holdings Corp., WC Docket No. 03-211, Comments of California (filed Oct. 27, 2003).

regard to any transmission media or technology."[49] Thus, whether a service is transmitted using packet-switched technology or circuit-switched technology,[50] uses broadband or narrowband transmission speeds,[51] is provided over copper, cable, fiber, or wireless or any other type of physical network facility, or uses ATM, frame relay, CDMA or other transmission protocol[52] – none of these factors are relevant in determining how voice-grade telephony service is defined under the Act. The classification of that service under the Act "depends on the nature of the service being offered to customers."[53] The nature of the service offered in turn "depends on the functional nature of the end-user offering"[54] under the definitions

[49] See also CALEA Second Report and Order, 15 FCC Rcd 7105 at n.69 ("CALEA, like the Communications Act, is technology neutral. Thus, a carrier's choice of technology when offering common carrier services does not change its obligations under CALEA").

[50] See, e.g., In re Deployment of Wireless Services Offering Advanced Telecommunications Capability, 13 FCC Rcd 1401, ¶ 41 (1998) (FCC rejected the contention that the 1996 Act refers only to local circuit-switched technology or close substitutes); see also In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 FCC Rcd 24011, ¶¶ 35 and 36 ("xDSL and packet switching are simply transmission technologies and are telecommunications services.")

[51] AT&T v. Portland, 216 F.3d at 874, 877-78, Brand X Internet Services v. FCC, 345 F.3d at 1135-40; Association of Communications Enterprises v. FCC, 235 F.3d 662, 668 (D.C. Cir. 2001) (order vacated on other grounds) (high-speed connections to the Internet offered by wireline and cable providers are telecommunications services within the definitions of the Act.)

[52] In particular, Congress' intent not to attach any legal significance to the transmission medium or protocols used is evidenced by its exclusion of the term "protocol" from the definition of information service in § 153(20).

[53] Report to Congress, 13 FCC Rcd 11501, ¶ 59 ("Congress direct[ed] that the classification of a provider should not depend on the facilities used … Its classification depends rather on the nature of the service being offered to customers.") See also Second Computer Inquiry, 77 FCC 2d 384, ¶ 97 n.35 ("The offering of store and forward services should not be confused with the use of store and forward technology in routing messages through the network as part of basic service. Message or packet switching, for example, is a store and forward technology that may be employed in providing basic services.")

[54] Report to Congress, 13 FCC Rcd 11501, ¶¶ 59; 86 ("the classification of a service under the 1996 Act depends on the functional nature of the end-user offering.")

of the Act. More particularly, the nature of voice-grade telephony service as a telecommunications service does not change simply because the technological means and physical transport media used to deliver the service have changed.[55]

The FCC has noted that, like earlier generation protocols, Internet Protocol (Transmission Control Protocol/Internet Protocol suite) supports interconnections across any physical transport medium, including wireline, terrestrial wireless and satellite, at various rates, and can support various applications.[56] A provider of a real-time voice call using IP technology transmits the call by converting the voice message from TDM protocol (one digital protocol) to Internet protocol (another digital protocol), and then transmitting the voice message over a fiber-based packet-switched public network instead of a copper-based, circuit-switched public network.

Under the Act, Congress not only did not distinguish services on the basis of transmission protocol technology, but also made no distinctions based on the type of facilities used – i.e, the physical infrastructure over which a service is transmitted. The physical infrastructure itself comprises the public network. As advances in technology have led to new transmission protocols, such advances

[55] In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 FCC Rcd 24011, ¶ 41 (plain language of the statute refutes any attempt to tie statutory definitions to a particular technology, and statute does not limit terms of Act to provision of voice, or conventional circuit-switched service).

[56] In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Third Report, 17 FCC Rcd 2844 (2002), at n.32.

have likewise led to technological changes in the public network. By expressly not distinguishing services based on the type of facilities over which they are provided, Congress made clear its intent not to lock the public network that supports telecommunications services into a time warp, just as Congress did not intend to lock in the definition of a telecommunications service to mean only "plain old telephone service."

The public Internet, when used for packet-switched voice-grade telephony service, is the most current network that has evolved from earlier "legacy" networks that support voice-grade telephony service using circuit switches.[57] Changes in network technology for delivering a service, however, does not alone change the nature of the service under the Act. For example, when network changes permitted the delivery of voice telephony service over radio spectrum, Congress continued to define that service as a telecommunications service.

The public Internet does not operate as a parallel network separate and apart from the physical network that enables anyone to make and receive a live voice telephone call. Voice-grade telephony services using TDM protocol and voice-grade telephony services using IP, when offered to the public, co-exist on

[57] The Internet is a product of government regulation and originally was a high-speed telecommunications network for university scientists working on classified federal research projects. The Internet that linked these scientists was funded with federal tax dollars, generated from taxes charged to the telephones of consumers and businesses. While many information services provided over the Internet may be free of regulation, services previously regulated by government do not become exempt from regulation simply because they are now furnished over the Internet. For example, stock trading remains subject to Securities and Exchange Commission regulation whether it is provided "on line" on the Internet or "off line" on the Wall Street trading floors.

the same physical facilities or infrastructure to send and receive calls. The public switched network supports both circuit-switched TDM voice services and packet-switched IP voice services. That is, a TDM voice call is initiated and terminated generally over the same equipment and facilities that support a voice call over IP. The fundamental distinction between the TDM and the IP live voice calls is based on the technology used to transmit the call, not the physical infrastructure used to make it.

For example, an analog, "legacy" voice call from a business customer might move over a T1 line to a central office, then through an ESS switch, hit a tandem switch, be inserted into long-haul transport, then travel back down the same hardware to the terminating end. As a voice call using IP, the call packets would move over the same T1 line to the central office, hit a media server, move through a router to long-haul transport, then travel back down the same hardware to the terminating end. To be sure, some of the equipment (e.g., ESS switching v. router switching) is different, but the underlying infrastructure is substantially the same.

The important differences lie in how the network, as distinct from the physical infrastructure, is configured Many networks co-exist on the same infrastructure. In the above example, separate TDM and IP calls from the T1 business customer may literally be moving though the same optical trunk at the same time (and be proximate wave fronts at different frequencies). Networks are defined principally by the technology they use and how their nodes are arranged.

Several networks each with different sets of nodes using the same technology may use the same infrastructure. Likewise, several networks with different nodes (some public, some private) with different technologies including TDM and IP may and in practice do use the same infrastructure. To the extent that differences exist, it is that some voice transmissions will use a series of interconnected circuit switches, others will use a series of interconnected packet switches, and still others will use a combination of both – all to reach the specific destination intended by the caller. All of these switches are interconnected using transmission lines traversing public rights of way obtained under federal and/or state authority.[58]

In sum, the Act and its history make clear that Congress did not intend to differentiate voice-grade telephony services on the basis of technology deployed or the type of facilities used to provide them. Congress thus understood that while new technologies and physical infrastructure may evolve to support voice-grade telephony and other services, the basic nature of these services, as defined under the Act, would not change.

D. Regulatory Parity

Inherent in the nondiscriminatory provisions of the Communications Act is the principle that similarly situated providers of similar services are treated in a like manner for regulatory purposes. Adherence to this principle also prevents or

[58] As Vonage indicated to the FCC, "connection to the Public Switched Network is an inherent functionality of Vonage's service …" Reply Comments of Vonage Holding Corp. In re Federal-State Board on Universal Service, April 18, 2003 at n.4.

mitigates regulatory arbitrage, whereby regulation, or the lack thereof, creates artificial incentives to providers in configuring their services.

In its NPRM, the FCC itself recognized this principle in stating that "any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways." NPRM, ¶ 61. In its recent order on AT&T, the FCC applied this principle by not exempting AT&T from paying access charges for its voice-grade telephony service simply because a portion of that service is transmitted using Internet protocol.[59] The FCC further stated that regulation, or lack thereof, should not create artificial incentives for converting to IP networks "merely to take advantage of the cost advantage afforded to voice traffic that is converted to [IP]…"[60]

The FCC should continue to apply these principles here, and not pick winners and losers through regulation. In addition to preventing regulatory arbitrage, the FCC should continue to distinguish for regulatory purposes those who own or operate the underlying facilities used to provide last-mile transmission services from those who do not.[61]

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[59] In California, access charge payments represent 30 to 50 percent of the intrastate revenue for small, rural local exchange carriers.

[60] In re Petition for Declaratory Ruling, FCC 04-97, Order, ¶ 18.

[61] See n.2 supra.

IV. JURISDICTION

A. Congress Adopted a Dual Regulatory Scheme Under the Act

From its inception, the Communications Act has embodied the concept of "cooperative federalism" whereby "federal and state agencies should endeavor to harmonize their efforts with one another…"[62] While Congress has amended the Act through the years to reflect changes in the communications landscape, with few exceptions, Congress has continued to preserve the dual regulatory scheme over communication services.[63]

In particular, Congress continued to maintain federal and state authority over voice-grade telephony service.[64] In amending the Act in 1996, Congress expressly preserved the state's role in enacting "requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the

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[62] Michigan Bell Tel. Co. v. MCI Metro Access Transmission Services, Inc., 323 F.3d 348 (6th Cir. 2003).

[63] See pp. 16-17 supra. See also § 541(d)(1) & (2) (preserving state jurisdiction over intrastate communications service provided by a cable system, other than cable service, whether offered on a common carrier or private contract basis). But see § 332(c)(3) preempting state regulation of wireless rates and entry while preserving state authority over wireless terms and conditions.

[64] California does not regulate the provision of intrastate information services, notwithstanding decisions by the Ninth Circuit that hold that § 152(b) of the Act does not restrict the states to regulating only common carrier services offered by a telephone carrier. California v. FCC, 905 F.2d at 1240-41. To the contrary, given § 152(b)'s broad language, the court found that states have the authority to regulate the intrastate enhanced services offered by a telephone carrier. Id. The court said: "That these enhanced services are not themselves provided on a common carrier basis is beside the point. As long as enhanced services are provided by communications carriers over the intrastate telephone network the broad 'in connection with' language of § 2(b)(1) places them squarely within the regulatory domain of the states." Id. The court further stated that the state's authority over intrastate communications services in § 152(b) is the same as the FCC's authority over interstate communications services in § 152(a). Id. at 1241-42, citing Nat'l. Ass'n of Regul. Util. Comm'rs. v. FCC, 880 F.2d 422 (D.C. Cir. 1989).

rights of consumers."[65] Congress further maintained the primary role of the states in promoting universal service and public safety.[66] In addition, Congress made clear that the development of advanced services was not the sole province of the FCC, providing in section 706, that both "the Commission and each State commission … shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans…"

Congress also provided in § 601(c) that "[the 1996] Act and amendments made by this Act shall not be construed to modify, impair, or supersede … State, or local law unless expressly so provided in such Act or amendments."[67] Among other things, this savings clause preserves state authority to apply laws governing the relationship between a provider of communication services, whether interstate

[65] 47 U.S.C. § 253(b). To be sure, Congress did not foreclose the possibility of preemption, but made clear that the FCC could only do so on a case-specific basis that a particular statute, regulation or legal requirement of a particular State or local government prohibits or has the effect of prohibiting an entity from providing telecommunications service. 47 U.S.C. § 253(d). States, for example, may adopt universal service support mechanisms so long as they do not "unfairly advantage or disadvantage one provider over another" or "unfairly favor or disfavor one technology over another. In re Federal-State Joint Board on Universal Service, 12 FCC Rcd 8776, ¶ 47.

[66] 47 U.S.C. §§ 254 and 615.

[67] Pub.L.No. 104-104, § 601(c)(1), 110 Stat. 56 (1996), 47 U.S.C § 152 (note). See also H.R. Conf. Rep. 104-458 at 185 (FCC's exercise of forbearance authority does not preclude states from enforcing requirements derived under state law).

or intrastate, and its consumers.[68] Congress reinforced its intent to preserve state authority under state law when, in discussing the scope of the FCC's forbearance authority, it made clear that forbearance by the FCC precludes a state from applying or enforcing a provision of federal law, but it does not preclude a state from imposing requirements derived from state law.[69]

In light of these express provisions that reaffirm state authority over areas traditionally within the province of state sovereignty, a construction of the statute that would otherwise preempt the states in these areas would be impermissible.[70] The Commerce Clause does not trump statutory provisions in which Congress has expressly reserved state authority in areas historically within the state's domain.[71]

To be sure, maintaining a dual regulatory structure enables the states and the FCC to harmonize their exercise of authority so that they can achieve common

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[68] See, e.g., Access Telecom, Inc. v. MCI Telecommunications Corp., 197 F.3d 694 (5th Cir. 1999); Comtronics, Inc. v. Puerto Rico Tel. Co., 553 F.2d 701, 707 n.6 (1st Cir. 1977); Ting v. AT&T, 319 F.3d 1126 (9th Cir. 2003); ASI Worldwide Communications Corp. v. WorldCom, Inc., 115 F.Supp.2d 201 (U.S. Dist. Ct. N. Hamp. 2000). In addition, as discussed, the scope of state authority is not limited to telecommunications services. California v. FCC, 905 F.2d at 1239-42 (rejecting the FCC's attempt to limit the reach of section 152(b) to intrastate common carrier communication services). See also 47 U.S.C. § 541(d)(1) & (2) (preserving state jurisdiction over intrastate communications service provided by a cable system, other than cable service, whether offered on a common carrier or private contract basis); 47 U.S.C. § 552(d) (state may enforce state consumer protection laws with respect to cable providers).

[69] Report to Congress, 13 FCC Rcd 11501, ¶ 48. See also H.R. Conf. Rep. No. 104-458 at 185 (Section 160 "is not intended to limit or preempt State enforcement of State statutes or regulation").

[70] Gregory v. Ashcroft, 501 U.S. 451, 460-61 (1991) (absent a clear indication of Congress' intent to change the balance of federal and state powers, the proper course is to adopt a construction that maintains the existing balance); Salinas v. United States, 522 U.S. 52 (1997).

[71] Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159, 173 (2001) ("Unless Congress conveys its purpose clearly, it will not be deemed to have significantly changed the federal-state balance.") (citation omitted).

policy goals embodied in both federal and state law. At the same time, Congress recognized that local conditions may require more tailored attention which states are best equipped to provide. California nevertheless agrees with the FCC that, to the extent that regulation is required to achieve the fundamental policy objectives that California shares, it should be as light-handed as possible.

B. Voice-Grade Telephony Service Using IP is Both Interstate and Intrastate in Nature

Real-time, voice service using IP technology is both an interstate and intrastate service, just as voice service offered by wireline and wireless carriers employing other technologies is both an interstate and intrastate service. The fact that IP technology is deployed to transmit a real-time voice call from, say, San Francisco to Palo Alto, California, does not convert the voice call into an interstate call.

As discussed, many providers of voice-grade telephony over IP advertise their service to the public as a replacement for conventional voice telephone service. It is therefore reasonable to assume that the calling patterns for most residential customers using voice over IP service will be substantially similar to their calling patterns using conventional telephone service offered by local exchange carriers and wireless carriers. Currently, about 78 percent of traditional voice telephony calls provided by local exchange carriers is intrastate in nature,

and about 22 percent is interstate in nature.[72] The percentage breakdown for voice telephony calls provided by wireless carriers is 83 percent intrastate and 17 percent interstate.[73]

C. Voice-Grade Telephony Service Using IP is Jurisdictionally Severable

When a voice call using IP technology is transmitted, it must be properly routed in real-time between the point of origin and the point of destination. Determining where a packet originates and terminates is generally straightforward. The Internet functions by embedding source and destination information in each packet, and varying levels of routers to assess the destination information. Each IP packet that travels on the public Internet carries the "source IP," which is the unique IP address of the machine which originated the packet, and the "destination IP," which is the unique IP address of the physical machine or connection to which the packet is routed. The source IP is thus correlated with the physical location of the machine or connection from which the call begins. The source IP is known to the provider when it receives the packet at the provider's gateway or point of interconnection, from which it routes the call to its final destination.

Routers automatically determine which direction a packet should go, and while the routing may be circuitous, the packet is finally joined with others to form a coherent voice message. The information about where a packet originates

[72] FCC Telecommunications Industry Revenue Report, 499-A 2004, Table 6, March 2004, at Table 6.

[73] Id.

is retained. Origin information is associated with the message and can be identified. For example, companies like Abika.com provide a service which traces IP addresses and locates the origin and destination of any transaction using an IP address.[74] Nuvio, a provider of voice service over IP, indicates that its "system is configured in most instances to send automated number identification information."[75]

While tying the source of the packet to a geographic location is not normally expected to be problematic, other means to locate the physical source of a voice over IP call are also commercially available. For example, one can make a first-order estimate of the source ZIP code by using several freely available Internet services.

The fact that a VoIP provider may allow its customer to select an area code that does not coincide with the customer's physical location for his voice calls does not preclude jurisdictional distinctions. It bears emphasis, however, that as a practical matter, residential customers are highly unlikely to choose this option for their primary line because all of their local calls from family, friends, neighbors,

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[74] www.abika.com; www.visualware.com. See also "Skype's VoIP ambitions", htt;://new.com.com/2008-7352-5112783.html?tag=nl ; NPRM, para. 54 ("some vendors of VoIP equipment … [can] transmit location and call-back information through software upgrades."

[75] www.nuvio.com; See also Statement of Michael K. Powell, Federal Communications Commission on Voice over Internet Protocol, Before the Committee on Commerce, Science and Transportation, United States Senate, February 24, 2004 at 12; Responses to Post-Hearing Questions for Chairman Powell, February 27, 2004 VoIP Hearing before the Senate Commerce Committee (response to Sen. Boxer: "…in cases where a phone (or other equipment used to make a call is stationary, it seems very likely that a system could be designed to transmit the caller's precise location along with the caller's voice communication.") Since most VoIP service is designed to replace conventional telephone service, it is reasonable to assume that most VoIP service will be stationary.

and local businesses will be rated as toll calls. Implicitly recognizing this fact, some providers of voice over IP pitch the use of an out-of-region area code as a second number for incoming calls only so that the customer's family and friends in the selected area code can call the customer without paying toll charges.[76] For a primary line for voice-grade telephony service, however, it is reasonable to assume that the vast majority of residential customers using voice service over IP will choose an area code that corresponds with their physical residence, given that over 75 percent of calls via local exchange carriers are local or intrastate in nature.

Similarly, inasmuch as voice-grade service over IP is marketed as a replacement for traditional voice service, it is reasonable to assume that the vast majority of residential and small business customers will use voice over IP from their residence or business, just as they use their traditional telephone service. Again, while it may be true that customers can use this VoIP service from anyplace in the world, such usage is likely to be a tiny fraction of its general use from a stationary point, just like traditional telephony service.

In any event, the fact that a customer using voice service over IP is not tied to a particular geographic location does not defeat the ability to make jurisdictional distinctions through the use of proxies or safe harbors for the purpose of universal service. That is precisely what the FCC has done with

[76] www.packet8.com. In any event, as discussed, to the extent that a VoIP customer does select an out-of-region area code, that circumstance does not detract from the fact that the call still must be properly routed by those transmitting the call. Proper routing means knowledge of the physical location of the caller and called party if a real-time voice communication is to take place. VoIP providers do not transmit calls to random and unintended locations.

respect to wireless services, where customers may likewise place voice calls using an area code that does not correspond to their physical geographic location. Wireless carriers nevertheless distinguish the jurisdictional nature of their voice calls in determining their contribution requirements for federal and state universal service programs. For those carriers that are unable to make a precise jurisdictional allocation, the FCC permits carriers to rely on the safe harbor of 28 percent interstate/72 percent intrastate revenues for funding federal universal service programs.[77] The FCC could adopt the same proxy for voice service over IP. Alternatively, inasmuch as voice over IP service is advertised as a replacement for traditional wireline voice service, the FCC could adopt as a proxy the allocation of traffic as 22 percent interstate/ 78 percent intrastate reported by local exchange carriers.

In short, jurisdictional distinctions for voice service using IP technology are not only possible, but can practicably be made.

D. The FCC's Ancillary and Forbearance Authority

As discussed, Congress required those defined as telecommunications carriers offering services defined as telecommunications services to fund universal service, provide access to E911 service, provide access by disabled customers to

[77] In re Federal-State Joint Board on Universal Service, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 24952 at ¶ 1 (2002). The FCC has specifically taken into account practices by carriers in bundling services for a single price.; In re Policy and Rules Concerning the Interstate, Interexchange Marketplace, Implementation of Section 251(g) of the Communications Act of 1934, as amended, Report and Order, 16 FCC Rcd 7418 at ¶¶ 47-54 (2001).

voice-grade services, and adopt basic consumer protections. In its NPRM, the FCC asks whether it may apply its ancillary authority under Title I to require providers of VoIP service to comply with these mandates if the FCC were to conclude that voice-grade telephony services are not telecommunications services. In the alternative, the FCC asks that if VoIP service providers are offering telecommunications services, whether the FCC should forbear from regulating them in accordance with § 160. In either case, the following must be considered.

First, Title I contains no specific grant of jurisdiction to the FCC. California v. FCC, 905 F.2d at 1240. The exercise of Title I authority over information services, if the FCC were to classify voice-grade service over IP as such, must be ancillary to the FCC's exercise of the specific responsibilities under Title II over interstate common carrier (i.e., telecommunications) services. Id. at n.35. As discussed in California's comments in the Wireline Broadband Inquiry, if the FCC reclassifies an ILEC's underlying transport service used to connect to the Internet as an information service, the FCC will have removed the predicate Title II transport service upon which the FCC's Title I authority depends. The FCC's exercise of its Title I authority would thus no longer be ancillary to the exercise of any specific responsibilities under Title II, and such exercise would be improper under applicable law.[78]

[78] California Comments in Wireline Broadband Inquiry at 27-28.

However, even if the underlying transport remains a common carrier service, the FCC would nevertheless need to demonstrate how its assertion of Title I authority over voice-grade service using IP is ancillary to traditional Title II concerns. The FCC could not simply engraft the same Title II requirements onto non-telecommunications services that apply to telecommunications services. With the exception of § 254(d), where Congress expressly gave the FCC discretion to require "*any other provider* of interstate telecommunications" to contribute to federal universal service programs if required by the public interest, §§ 222, 225, 255, and 615 contain no similar language. It is therefore unclear as a matter of law whether Congress intended these provisions to apply to voice service using IP if providers of that service are not deemed telecommunications carriers offering telecommunications services.[79]

If, however, the FCC classifies at least voice-grade service using IP as a telecommunications service, the FCC has authority to forbear from applying or enforcing federal requirements that attach to the provision of that service. However, in exercising its forbearance authority under § 160, the FCC would need to determine that (1) enforcement of such requirements is not necessary to ensure

[79] Compare § 615 ("Congress finds that" "the rapid, efficient deployment of emergency *telecommunications service* requires statewide coordination of the efforts of" first responders. Pub.L. 106-81, sec. 2, Oct. 26, 1999, 113 Stat. 1286, with § 251(c)(3) (911 is designated as emergency telephone number for "both wireline and wireless *telephone service*.") Also, compare § 225(a)(3)'s reference to "*voice communication service*" with § 255(c)'s reference to a "provider of *telecommunications service*" in connection with service to disabled customers.

just, reasonable and nondiscriminatory terms and conditions of service; (2) enforcement of such requirements is not necessary for the protection of consumers; and (3) forbearance from applying such requirements is in the public interest. At a minimum, the FCC would need to consider how the currently rapid migration of customers, particularly customers of facilities-based carriers, to voice service using IP will affect universal service, access to emergency services, access by the disabled to services enjoyed by the non-disabled, and assurance of consumer protection. As discussed above, exemption of providers of voice-grade telephony service using IP from certain obligations, such as funding state universal service programs, would have serious, adverse impacts.

The CPUC has previously filed comments that oppose forbearance of the last-mile transmission services provided by cable operators via cable modem service and by wireline carriers via DSL service to their customers, and incorporates those comments herein.[80] And, based on the analysis that the CPUC's Telecommunications Division conducted, it is not at all clear that exempting voice-grade telephony service using IP from otherwise applicable regulatory obligations will protect consumers and serve the public interest.

[80] See n.2 supra.

V. CONCLUSION

The explosive growth rate of voice-grade telephony and other IP-enabled services significantly impacts important public policy objectives embodied in the Communications Act. It is therefore timely for the FCC to consider the appropriate framework that should govern the provision of these services. An appropriate framework should incorporate the principles that California has discussed, and should recognize that the states remain critical partners with the FCC in achieving the goals of the Act.

Respectfully submitted,

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May 28, 2004

ATTACHMENT 1

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities Universal Service Obligations of Broadband Providers Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements	CC Docket No. 02-33 CC Dockets Nos. 95-20, 98-10

COMMENTS OF THE PEOPLE OF THE STATE OF CALIFORNIA AND THE CALIFORNIA PUBLIC UTILITIES COMMISSION

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May 3, 2002

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I. SUMMARY

Over twenty years ago, the FCC recognized that basic transmission services underlying the provision of information services were bottleneck services that the FCC could, and should, regulate to ensure that incumbent local exchange carriers fairly and reasonably competed in offering their own unregulated information services. The FCC thus required that these facilities-based carriers unbundle and offer the transmission component of information services under tariff, and acquire such transmission service for their own information services under tariff. In the 1996 Act, Congress recognized that incumbent local exchange carriers continued to exercise bottleneck control over essential "last mile" transmission facilities" and required these carriers to share and unbundle these facilities at cost-based rates to competitors. In carrying out Congress' mandate, the FCC has previously and consistently included facilities-based DSL service as a common carrier transmission service subject to the 1996 Act's unbundling obligations.

Nothing has significantly changed since the adoption of federal unbundling and interconnection requirements to warrant their removal. The incumbent local exchange carriers continue to maintain exclusive control over essential, bottleneck transmission facilities required by competitors to provide their own information services using broadband technology. This is particularly true in California, where forty-five percent of its residents living in locales with access to broadband service have DSL service as their sole broadband option. There are presently no comparable alternatives for these customers, including cable modem service. Maintaining existing unbundling and

interconnection requirements is therefore critical to ensuring nondiscriminatory and reasonable access to these facilities if consumers are to realize the 1996 Act's promise and goal of having access to a choice of services from competing providers at lower prices.

Against this backdrop, the FCC's proposal to reclassify essential, bottleneck broadband transmission services, currently under the exclusive control of the incumbent local exchange carrier, is seriously misguided as a matter of public policy. Until the essential bottleneck controlled by the incumbent local exchange carrier is broken by continuing to enforce federal unbundling and interconnection requirements, the means to achieve 1996 Act's goals – through robust and viable competition – cannot be effectuated.

The FCC's proposal is also wrong as a matter of law. The bottleneck transmission facilities of the incumbent local exchange carrier are Title II common carrier services that the FCC is not free to reclassify. Nothing in the 1996 Act evidences an intent by Congress to exempt these services from the scope of Title II simply because they employ broadband technology. To the contrary, section 251 makes no distinction between conventional and high-speed transmission technologies in defining the obligations of incumbent local exchange carriers. And in section 706 Congress made clear that it expected the FCC and the states to use their regulatory tools over common carrier services to further the deployment of advanced telecommunication services, including DSL service, to all Americans. Among the tools identified is regulatory forbearance, a

tool defined in section 160 that gives the FCC the authority to forbear from applying Title II requirements to telecommunications transmission services under specified criteria. The FCC's proposal to reclassify broadband transmission services that the FCC itself consistently classified as common carriage constitutes an impermissible end-run around section 160.

In light of the above, California strongly urges the FCC to reconsider its proposal, and to maintain and enforce the federal safeguards and obligations currently in place. The need for regulatory certainty and stability is essential if the consumer benefits of the 1996 Act are to be finally and fully realized.

II. INTRODUCTION

A. Background

The People of the State of California and the California Public Utilities Commission ("California") respectfully submit these comments in response to the Notice of Proposed Rulemaking, issued February 15, 2002, by the Federal Communications Commission ("FCC") in the above-captioned proceedings. In its NPRM, the FCC seeks comment regarding the appropriate legal and policy framework for broadband access to the Internet provided over domestic wireline facilities, consistent with the Telecommunications Act of 1996 ("1996 Act" or "Act").

Broadband access to the Internet is defined by the FCC as "domestic wireline broadband Internet access services . . . over existing and future infrastructure of the traditional telephone network." NPRM, ¶ 1 n.1. As defined by the FCC, Internet access

services consists of both an information and transmission component. The information component consists of services other than transport, such as interaction with content on web sites and e-mail service. These services are classified as information services, and are not currently regulated under the Communications Act. The other component consists of the underlying transmission facilities upon which the information services are transported. These transmission facilities, when provided by facilities-based local exchange carriers, are the "last-mile" facilities to the customers over which incumbent facilities-based local exchange carriers ("ILECs") have virtual monopoly control. Until now, transport service over these transmission facilities, which includes DSL service, has consistently been classified as a common carrier telecommunications service. Under federal law and regulation, transport service, when provided by facilities-based carriers, is required to be unbundled from the information services and offered on reasonable terms and conditions.

In these comments, California agrees that, once a customer's call is transported to the Internet, a customer receives from an Internet Service Provider ("ISP") "information" services. California, however, believes that the transmission services of facilities-based carriers used to connect the customer to the Internet in order to access the Internet and Internet-based information services, remain telecommunications services under Title II of the Act, regardless of the technology used. The fact that these the facilities-based carrier bundles transmission services with information services does not change the character of the transmission services as common carriage.

One of the principal objectives of the 1996 Act is to promote the widespread and rapid deployment of new telecommunications technologies, including high-speed access services, while at the same time preserving opportunities for broadband competition.[1] The 1996 Act further seeks through competition to secure lower prices and higher quality services as well as to enhance the choices of services available to consumers. The dual duties of nondiscrimination and interconnection "together … mandate a network architecture that prioritizes consumer choice, demonstrated by vigorous competition among telecommunications carriers." AT&T v. City of Portland, 216 F.3d 871, 879 (9th Cir. 2000).

Congress recognized that the key to realizing competition in all markets was the requirement that the incumbent LEC share its network with competitors – by allowing the purchase of local telephone services at wholesale rates for resale to end-users, by allowing competitors to lease elements of the incumbent's network that have been unbundled, and by allowing competitors to interconnect their own facilities with the incumbent's network. AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 371 (1999). Except as otherwise expressly provided in the 1996 Act, Congress did not intend to relieve the ILECs of their network sharing obligations, notwithstanding that competing technologies (e.g., cable) might also spur local competition.

Currently, one of three California residents live in areas where DSL service is the sole means of gaining broadband transport to an ISP. The incumbent LECs are the

[1] Preamble to 1996 Act.

dominant, and in many cases, the exclusive provider of broadband service in California. Certain customers in discrete metropolitan areas may also obtain transport to the Internet from cable operators via a cable modem transmission service over cable facilities; however, in California, primarily because of the substantial cost in upgrading cable facilities to provide cable modem service, such service is limited to certain suburban areas with spotty coverage in downtown urban areas. Other transport methods of accessing the Internet use wireless, broadcast, and unlicensed spectrum technologies. These technologies for transport to the Internet, however, are not widely available to California customers as a viable alternative to either DSL service or cable modem service.

The FCC has previously recognized that the market for high-speed transport services used by residential customers to access the Internet is local in nature:

> The relevant geographic markets for residential high-speed Internet access services are local. That is, a consumers' choices are limited to those companies that offer high-speed Internet access services in his or her area, and the only way to obtain different choices is to move. While high-speed ISPs other than cable operators may offer service over different local areas (e.g., DSL or wireless), or may offer service over much wider areas, even nationally (e.g., satellite), a consumer's choices are dictated by what is offered in his or her locality.

In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc, and America Online, Inc., 16 FCC Rcd 6547, ¶ 74 (2001) ("Merger Order").

No substantial changes have occurred in the broadband market which would justify a new definition of the relevant residential market.

Because of the essential, bottleneck nature of DSL service, this service since its inception has been regulated as a tariffed, common carrier telecommunications service when provided by the ILEC. With respect to cable modem transmission service, however, the FCC has relied exclusively on market forces to promote competition for this access service. Rather than spurring competition, the FCC's reliance on market forces alone has generally led to an exclusive arrangement in each market between the operators of cable networks and a single ISP, either affiliated or non-affiliated. As a result, aside from otherwise applicable merger agreements, customers utilizing cable facilities effectively have no choice but to subscribe to the services of the ISP selected by the cable operator if they seek to access the Internet via cable facilities. The FCC has declined to require open access to the cable modem platform of cable providers that parallels the open access requirement applicable to the wireline platforms of incumbent LECs.[2]

On March 15, 2002, the FCC issued a Declaratory Ruling and NPRM on the legal classification and regulatory framework governing access to the Internet via cable facilities. Cable modem transport service offered by cable operators is the functional equivalent of DSL service offered by wireline providers. In its Declaratory Ruling, the FCC classified cable modem transport service as an "information" service. The ruling is currently the subject of judicial challenges.

[2] Customers could subscribe to the access services of an unaffiliated ISP, but in doing so, would be paying twice for access – once to the ISP affiliated with the cable operator, and again to the ISP of the customer's choosing.

B. The NPRM

In this NPRM, the FCC seeks to define the appropriate legal and policy framework for wireline broadband services, such as DSL service, which will promote competition, investment in and deployment of new technologies and services, and customer choice. The FCC tentatively concludes that wireline broadband Internet access service provided over a carrier's own facilities should be statutorily classified as an "information service" under the Act, and seeks comment on that conclusion. NPRM, ¶ 25. The FCC further tentatively concludes that the transmission component of wireline Internet access service is "telecommunications," and not a "telecommunications service." Id. The FCC also seeks comment on the appropriate statutory classification of broadband transmission when it is not coupled with the Internet access component, including whether the provision of wholesale xDSL transmission should be considered "telecommunications" or "telecommunications service" under the Act. Id., ¶ 26.

The FCC next asks for comment on the appropriate regulatory framework that would apply to wireline broadband Internet access services if classified as information services. In particular, the FCC seeks comment on what regulatory requirements, if any, should attach to the "telecommunications input" of these services. NPRM, ¶ 30. In particular, the FCC asks whether it should modify or eliminate existing access obligations on facilities-based providers who self-provision wireline broadband Internet services, including those access obligations applicable to transmission services necessary to access the Internet. NPRM, ¶ 16.

The FCC also seeks comment generally on the role of state authorities with respect to these services. Id. Finally, the FCC asks for comment on whether facilities-based providers of broadband services using wireline and other platforms, including cable and wireless, should be required to contribute to universal service. Id.

California will generally track the organization of issues set forth in the NPRM in addressing these issues.

III. STATUTORY CLASSIFICATION OF WIRELINE BROADBAND INTERNET ACCESS SERVICES

The FCC tentatively concludes that the provision of wireline broadband Internet access service is an "information service," subject to Title I of the Act, when such service is provided by an entity over its own transmission facilities bundled with Internet services. The FCC suggests that when provided on a stand-alone basis by a facilities-based entity over its own transmission facilities at wholesale to an ISP, the transmission component of wireline broadband Internet access service is "telecommunications," and not a "telecommunications service," under the statute because the offering is not made "directly to the public" within the meaning of section 153(46).

California strongly disagrees with the FCC's conclusions. California believes that the transport component of "Internet access services" is properly subject to regulation as a common carrier transmission service under Title II when provided by a facilities-based carrier, regardless of whether that service is bundled with the carrier's own information services or offered on a stand-alone basis to ISPs or other end users.

A. Definition of Internet Access Service

In its NPRM, the FCC defines "Internet access service" to include both the transmission component used to obtain access to the Internet, and information services that travel over the transmission component. Until now, federal law has treated the transmission component as a separate and distinct service that, when provided by a facilities-based carrier, qualifies as common carriage subject to Title II. This is so whether or not the facilities-based carrier bundles the transmission service with information services into a single packaged "service." Advances in technology to allow greater speeds of transmission do not alter the regulatory classification of transmission service as common carriage subject to Title II.

B. Internet Access Using DSL Service Consists of Both a Telecommunications Service Component and an Information Service Component

Section 153(43) defines "telecommunications" as the "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." Section 153(46) defines a "telecommunications service" as the "offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." Section 153(20) defines an "information service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications …"

Based on these definitions, the transmission component of wireline broadband services used or offered by facilities-based carriers qualifies as a "telecommunications service." This is so whether this component is bundled by the facilities-based carrier with other services or is offered on a stand-alone basis. Transport service necessary to access an ISP, whether via narrowband or broadband, consists of making available a two-way transmission path between an end-user and an ISP upon which content may be sent. An end use customer using these services simply seeks connectivity to an ISP, and does not change the format or content of the transmission itself. The service is functionally an access transport service comparable to other services used to access interstate and intrastate long distance networks. The FCC itself has said as much:

> Like the point-to-point private line service high volume telephony customers purchase for direct access to IXCs' networks, GTE's ADSL service provides end users with a direct access to their selected ISPs, over a connection that is dedicated to ISP access.

GTE DSL Order, 13 FCC Rcd 22466, ¶ 25.

Services provided by the ISP to an end-use customer after the customer is connected via a high-speed transmission service to the ISP qualify as "information services," as defined under Section 153(20). These ISP-provided services enable an ISP customer to access information, e-mail, or other services offered over the Internet. These ISP-provided services ride on top of the transmission service. A customer may also interact with the data stored on the facilities of a wireline provider, but such interaction is

distinct from the transmission service to the storage facilities themselves. From the subscriber's point of view, the transmission service is transparent.

It is true that certain services, such as protocol conversion and information storage, are essential for obtaining access to content on the Internet. The FCC recognized that "[w]ithout the use of these 'information service' data links, schools and libraries would not be able to obtain access" to content on the Internet. In the Matter of Federal-State Joint Board on Universal Service, 12 FCC Rcd 8776, ¶ 441 (1997). The FCC, however, has appropriately classified these services as a necessary requirement to enable transmission, which do not convert the transmission service to an information service. Computer II Final Decision, 77 FCC 2d 384 (1980), ¶ 95 (data processing, computer memory or storage, and switching techniques can be components of a basic service if they are used solely to facilitate the movement of information); Advanced Services Order, 13 FCC Rcd 24011 (1998) at n.57 ("Use internal to the carrier's facility of … bandwidth compression techniques, … packet switching, error control techniques, etc. that facilitate economical, reliable movement of information does not alter the nature of the basic service.")

The FCC has also previously recognized that the transmission service, used to access the information service, does not become an information service when both are combined by an ILEC. As the FCC reported to Congress, "[i]t is plain … that an incumbent local exchange carrier cannot escape Title II regulation of its residential local

exchange service simply by packaging that service with [an information service such as] voicemail." Report to Congress, 13 FCC Rcd 11501 (1998), ¶ 60.

Against this backdrop, the FCC proposes to reclassify DSL and other broadband transport services as non-common carrier services when combined with Internet access services. The FCC claims that it had previously told Congress that "Internet access services are appropriately classified as information, rather than telecommunications, services." NPRM, ¶ 20 n.44. This claim is misleading. In the Report to Congress, the FCC determined that "Internet access providers" should be classified as providers of information services. The FCC, however, made clear that it was treating Internet access services, as particularly defined in that Report, as synonymous with the types of services provided by Internet Service Providers, such as information on web sites. Report to Congress, 13 FCC Rcd 11501, ¶ 63 n.125 ("We will use the terms "Internet access providers" and Internet service providers" interchangeably in this Report."). The FCC was not referring to the regulatory classification of dial-up and high-speed transport services necessary to reach the "Internet access provider." Indeed, in the Report, the FCC carefully distinguished Internet access services from the transmission services necessary to reach an ISP via a wireline carrier, defining the latter as those provided either by dial-up connections over the public switched telephone network, or by dedicated data circuits over wireline networks. Id., ¶¶ 63, 66-67. Whether conventional or high speed, the transmission services used to obtain access to an ISP are functionally equivalent, and have always been classified as telecommunications services when provided by an ILEC.

Id. at ¶ 67 ("The provision of leased lines [by telecommunications carriers] to Internet service providers ... constitutes the provision of interstate telecommunications.").

In its NPRM, the FCC for the first time suggests that because broadband access services allow subscribers the "capability" of interacting with stored data retrieved from the Internet, the ILEC-provided transmission services used to access an ISP somehow transmute into information services. Under this logic, plain old voice telephone service that connects to a voice mail information service would also be transformed into an information service because the voice service gives the caller the "capability" of using the voice mail box. The FCC's reasoning proves too much. Not only does the FCC's logic impermissibly read the term "telecommunications service" out of the Act, but in a regulatory sleight of hand, the FCC would effectively gut the common carrier foundation upon which the entire Act rests.

C. The FCC's Proposal is Contrary to the Language, Structure and Purpose of the Act

1. DSL service is a "telecommunications service" under the Act when bundled with Internet access service by an ILEC

Nothing in the 1996 Act evidences an intent by Congress to alter the bedrock foundation of the Communications Act that requires monopoly carriers to offer bottleneck services on a non-discriminatory basis under tariffed rates, terms and conditions. To the contrary, Congress amended the Communications Act to require more extensive unbundling of essential, bottleneck network facilities controlled by incumbent LECs in order to promote access to the network by competitive local exchange carriers

("CLECs"). Thus, Congress went beyond the previous mandates of the Computer Inquiries and the Modification of Final Judgment by enacting sections 251, 252 and 271. Congress well understood that interconnection by CLECs to the networks of incumbent, facilities-based carriers was the key to fostering local competition so as to produce a greater choice of services at lower prices for consumers.

In particular, section 251 makes clear that Congress intended ILECs to share and unbundle their last-mile bottleneck transmission facilities – whether conventional or high-speed – and to offer these facilities at cost-based prices, to enable meaningful and direct competition by CLECs. Nothing in the Act evidences an intent by Congress to exempt bottleneck transmission services from the scope of Title II simply because these services use high-speed broadband technology.

At the same time, Congress recognized that once the goals of a robust competitive local marketplace were fully realized, the need for regulation of services and facilities subject to Title II might no longer be necessary. Accordingly, Congress enacted section 160(a), which enables the FCC to forbear from applying Title II regulation if certain, specific conditions are met. There is no evidence that Congress intended that the FCC could achieve the same result prematurely by unilaterally redefining fundamental terms in the Act, and effectively nullifying section 160(a). The FCC cannot accomplish by regulatory fiat what Congress alone has the authority to change.

The FCC's proposal to redefine ILEC-provided broadband transmission services as information services not only is inconsistent with sections 160(a), 251, 252, and 271 of the Act, but it also is in conflict with sections 153(46), 272 and 706.[3]

Section 153(46) provides that a "telecommunications service" is a common carrier service provided directly or indirectly to the public and subject to Title II, "regardless of the facilities used." The FCC nevertheless distinguishes ILEC-provided transmission services for disparate regulatory treatment based precisely on the facilities used. The FCC correctly does not contend that narrowband services (i.e., dial-up services) lose their character as common carrier transmission services because they allow a subscriber to connect to the Internet for information services. Cf. AT&T v. City of Portland, 216 F.3d at 877-878 (Internet service transmitted through telephone pipeline is telecommunications service). The same is true for DSL and other broadband transmission services. Indeed, the FCC itself said, "xDSL and packet switching are simply transmission technologies and are *telecommunications* services… Incumbent LECs … are currently offering a variety of services in which they use xDSL technology and packet switching to provide members of the public with a transparent, unenhanced, transmission path…" Advanced Services, 13 FCC Rcd 24011, ¶ 35 & 36 (citations omitted) (emphasis added). The fact that a high-speed transmission technology rather than a low-speed, dial-up technology is utilized to reach a carrier's or ISP's point of presence in order to access the Internet does not transform DSL and other special access services from Title II services to information

[3] Section 706 has been codified in the note to section 157 of the 1996 Act.

services. See, e.g., Universal Service Order, 12 FCC Rcd 8776 (1997), ¶ 780 (FCC expressly included special access services within the definition of "telecommunications." DSL is a type of special access service.); Advanced Services Order, 13 FCC Rcd 24011, ¶ 41 (rejecting contention that terms of the Act refer only to local circuit-switched technology or close substitutes: "The plain language of the statute … refutes any attempt to tie … statutory definitions to a particular technology.")

The FCC's proposal also conflicts with section 272, which evidences congressional intent to treat high-speed transmission service to the Internet as common carriage. Section 272 provides that Bell Operating Companies ("BOCs") may not offer in-region interLATA services until they meet the market-opening requirements of section 271. In implementing that section, the FCC stated in its Non-Accounting Safeguards Order that if a BOC's provision of an Internet or Internet access service incorporates a bundled, in-region interLATA transmission component –whether via dial-up or dedicated access -- over its own facilities or through resale, the BOC may not provide Internet or Internet access service until it receives in-region interLATA authority under section 271. Non-Accounting Safeguards Order, 11 FCC Rcd 21905 (1996), ¶ 127 and n.291. By reclassifying the interLATA transmission component of an ILEC's Internet access service as an information service, the FCC effectively reads section 272 out of the Act.

The FCC's proposal further conflicts with section 706. In that section, Congress evidenced an intent to treat high-speed transmission service to the Internet via wireline broadband facilities as Title II telecommunications services, not information services.

Specifically, Congress directed the FCC and state commissions with authority over "telecommunications services" to encourage the deployment of "advanced telecommunications capability" to all Americans, including schools in particular. In section 706(c), Congress made clear that '"advanced telecommunications capability" is defined *without regard to any transmission medium or technology,* as high-speed, switched, broadband *telecommunications* capability that enables users to originate and receive data and voice and other communications *using any technology*." (emphasis added).

The express language used in section 706 is significant for two reasons. First, "advanced telecommunications capability" is a transmission service. This is evidenced by Congress' inclusion of the term "telecommunications" as a modifier to "advanced capability" and a description of the service as one that enables a customer to send and receive communications – a description that parallels the definition of "telecommunications" in section 153(46). 47 U.S. C. § 153(46) ("telecommunications" means the transmission … by the user… of the information sent and received.")[4]

Second, Congress made clear that this advanced telecommunications capability remains a transmission service, whatever technology it uses. The fact that a high-speed

[4] In contrast, in section 254(h)(2), Congress used the unmodified term "advanced services" when it meant to broadly include both advanced telecommunications and advanced information services. Specifically, in subsection (2)(A), Congress provided that the FCC "shall establish competitively neutral rules to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services." In this section, Congress further distinguished "access to" --i.e., transmission to – these advanced services from the advanced services themselves, and intended that such access remain affordable so that it is available "on a universal basis.".

access service, such as DSL, is used in lieu of a narrowband service to connect a customer to an ISP does not alter the classification of this transport function as common carriage under Title II. This is confirmed by the language of section 706 that leaves discretion to the FCC to use "price cap regulation, "regulatory forbearance," and "other methods that remove barriers and provide the proper incentives for infrastructure investment." These measures apply only and directly to services subject to Title II. It would not have been necessary for Congress to specify regulatory measures applicable only to common carrier services if Congress intended that the FCC could simply reclassify these services as non-common carriage and unilaterally remove them from the scope of Title II to achieve the FCC's desired policy goals.

The FCC's proposal to reclassify DSL-type services as information services constitutes an arbitrary reversal of its own recent construction of the Act. At least three times, the FCC previously told the D.C. Circuit that advanced services qualify as common carrier "telecommunications services." In Association of Communications Enterprises v. FCC, 235 F.3d 662 (D.C. Cir. 2001), the court reversed the FCC's decision that advanced telecommunications services provided through a telephone company's subsidiary were not subject to sections 251 and 252 of the Act. In that decision, the FCC conceded that advanced telecommunications services were subject to Title II. Id. at 664, 668. In Worldcom, Inc. v. FCC, 246 F.3d 690, 694 (D.C. Cir. 2001), the FCC affirmed that DSL-based advanced services qualify as "telecommunications services." The court vacated in

part the order at issue there on other grounds. The same affirmation was made in Association of Communications Enterprises v. FCC, 253 F.3d 29, 31 (D.C. Cir. 2001).

In the end, the FCC appears to assume that there is a clear regulatory demarcation between so-called "broadband Internet access services" and other telecommunications services that use broadband technology, yet declines to define where that demarcation lies. Increasingly, as voice traffic migrates to broadband technologies, voice traffic itself will be swept into the FCC's definition of an information service, and not subject to the consumer protections of Title II applicable to common carriers. The FCC's construction of the Act effectively and impermissibly enables the FCC to read Title II out of the Act. Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 376 (1986) ("only Congress can rewrite this statute").

Not only is the FCC's analysis contrary to the statute, but it is also at odds with judicial opinions that focus on the general status of the provider as a common carrier, rather than the nature of the service, in determining whether Title II applies. In California v. FCC, 905 F.2d 1217 (9th Cir. 1990), the Ninth Circuit made clear that statutory language contained in the Act "distinguishes between *providers* of communications services, i.e., between carriers and non-carriers. When services are provided by facilities-based carriers (such as the Bell Operating Companies) who are otherwise common carriers, the statute makes no distinction based on the terms and conditions on which the services are offered, i.e., whether on a common carrier or private contract basis." Id. at 1240 (emphasis in original). See also Nat'l Ass'n of Regul. Util. Comm'rs v. FCC, 525

F.2d 630, 643 (D.C. Cir.), cert. denied, 425 U.S. 992 (1976) ("NARUC I") (noting general status of cellular common carriers requires that they may not discriminate against particular users in offering private dispatch services); Worldcom, Inc. v. FCC, 246 F.3d at 694 (upholding FCC decision that an ILEC does not lose its status as such, and remains subject to section 251(c) when providing services other than telephone exchange and exchange access services). Even the FCC previously acknowledged that "[c]ompanies that are in the business of offering interstate telecommunications functionality to end users are 'telecommunications carriers, and therefore are covered under the relevant provisions of sections 251 and 254 of the Act. *These rules apply regardless of the underlying technology those service providers employ, and regardless of the applications that ride on top of their services.*" Report to Congress, 13 FCC Rcd 11501, ¶ 105 (emphasis added).

2. DSL service offered at wholesale on a stand-alone basis is a telecommunications service

The FCC next seeks comment on whether to narrow the definition of "telecommunications services" so as to exclude from its scope transmission services sold by facilities-based carriers at wholesale. This approach must be rejected. As discussed, Congress intended that dominant, facilities-based carriers, such as the ILECs, continue to be subject to Title II in their provision of bottleneck transmission services, without regard to whether the ILEC bundles these services with ILEC-affiliated ISP services, or sells

them at wholesale or retail.[5] For this reason, "telecommunications service" is defined without distinction between wholesale and retail telecommunications service, but as service "to such classes of users as to be *effectively* available directly to the public, regardless of the facilities used." 47 U.S.C. § 153(46). When offered on a wholesale basis to a CLEC or to an ISP, the services are "effectively available" directly to the public.[6]

Once again, the FCC previously told Congress that "common carrier services include services offered to other carriers, such as exchange access service, and not just services provided to end users." Report to Congress, 13 FCC Rcd 11501, ¶ 115. Citing the legislative history and definition of common carriage in the Act, the FCC also explained in the Non-Accounting Safeguards Order, 11 FCC Rcd 21905, ¶¶ 264-265, that the term "telecommunications services" "was not intended to create a retail/wholesale distinction, but rather a distinction between common and private carriage. Common carrier services include services offered to other carriers …. Neither the Commission nor the courts … has construed 'the public' as limited to end-users of a service … we decline to limit the definition of telecommunications services to retail services" (citing NARUC I, 525 F.2d at 641).

[5] The D.C. Circuit further concluded that the ILEC could not avoid the unbundling provisions of section 251 merely by offering these advanced access services through an affiliate. Ass'n of Communications Enterprises v. FCC, 235 F.3d at 666.

[6] The degree of Title II regulation depends on the entity which is purchasing the service. When these lines are leased to an ISP, whether unbundled or bundled with other services, the ILEC is subject to Title II provisions against discrimination and charging unjust and reasonable rates. When leased to a CLEC, an ILEC must comply with additional unbundling and costing rules apply pursuant to section 251.

The FCC nevertheless recognizes that when an entity, such as an ILEC, offers broadband service on a stand-alone basis to third parties, a different analysis may apply. In that circumstance, the FCC concedes that the provision of such services may constitute telecommunications services.[7] The FCC, however, fails to demonstrate that Congress, on the one hand, intended to exempt an ILEC, a dominant facilities-based carrier, from the provisions of Title II when it bundles its DSL service with its own ISP services, but on the other hand, intended to regulate an ILEC under Title II when it sells unbundled DSL services directly to third parties. No such dichotomy exists either in the language, structure or policy of the Act, and indeed the opposite is true. The very purpose of the Act was to spur competition in local markets by requiring the incumbent LEC to unbundle its bottleneck facilities – whether existing, conventional facilities or new, broadband facilities -- to enable competitors to obtain wholesale access to these facilities in order to enter these markets. In recognition of that fact, the FCC has repeatedly recognized that broadband access services provided by wireline carriers qualify as "telecommunications services." In addition, in its Advanced Services Order, 14 FCC Rcd 19237, ¶ 21 (1999), the FCC agreed with the NTIA that "bulk DSL services sold to Internet Service Providers … are telecommunications services, and as such, incumbent LECs must continue to

[7] See Qwest Communications Corp. v. Berkeley, 146 F.Supp. 2d 1081, 1096 (N.D. Cal. 2001) (concession by Qwest that its offering of "high-quality broadband Internet-based data, voice, and imagery connectivity … to businesses, consumers, and other communications service providers" is a common carrier service).

comply with their basic common carrier obligations with respect to these services."[8]

The FCC's agreement with the NTIA is consistent with its own longstanding policy to treat ISPs as end-use subscribers which purchase retail services, including broadband transmission services, from the ILEC. See Association of Communications Enterprises v. FCC, 253 F.3d at 5 ("end-users and ISPs to which the ILECs offer [advanced] services are 'subscribers who are not telecommunications carriers' within the meaning of § 251(c)(4)(A)"). The ILEC may not lawfully discriminate against ISPs by refusing to sell them DSL service under the same tariffs applicable to other end-use customers.

By suggesting that the offering of stand-alone transport service, in contrast to bundled transport service, deserves disparate regulatory treatment as a common carrier service, the FCC essentially leaves it to the ILEC to decide unilaterally whether or not to offer this service to its competitors. The FCC, however, properly recognized over twenty years ago in Computer II that an ILEC which offers an information service must unbundle the bottleneck transmission service upon which the information service rides to prevent anticompetitive conduct. Congress not only did not change that requirement in the 1996 Act, but in fact strengthened it by requiring additional unbundling by an ILEC of its bottleneck facilities for lease to CLECs. Consistent with the pro-competitive objective of the Act, it cannot be a matter of discretion for the ILEC to offer, or not to offer, this

[8] "These obligations include: provisioning of such DSL services upon reasonable request; on just, reasonable, and nondiscriminatory terms; and in accordance with all applicable tariffing requirements." Id.

common carrier service to third parties when the ILEC itself bundles this service with its own information services.

D. The FCC's Proposal Arbitrarily Deviates from Longstanding Federal Policy

Not only is the FCC's proposal to reclassify broadband services contrary to the Act, but it also constitutes a sharp, illogical reversal of longstanding FCC policies. For over two decades, the FCC has consistently stated that information or enhanced services ride atop basic transmission service, and has treated the two services separately. Advanced Services Order, 13 FCC Rcd 24011, ¶ 36 ("the first service is a telecommunications service (e.g., the xDSL-enabled transmission path), and the second service is an information service, in this case Internet access.")[9] The FCC has never blurred the two into a single, deregulated service, as it attempts to do here. While it is true that the FCC has chosen not to regulate the transmission component of information services when offered by non-facilities-based carriers, the FCC has always asserted jurisdiction under Title II to regulate the transmission component of such services when offered by traditional facilities-based common carriers, like the incumbent LECs. In its Computer II proceedings, the FCC correctly recognized that basic transmission service used in connection with information services was a bottleneck service. The FCC properly

[9] See also In the Matter of Federal-State Joint Board on Universal Service, 13 FCC Rcd 5318 (1997) at n. 827 ("the fact that the reseller provides an enhanced service with a basic service for a single price does not render the basic voice service an enhanced service. In that instance, the enhanced service is not combined with the basic service into a single enhanced offering because, functionally, the consumer is receiving two separate and distinct services, voice-grade telephone service and Internet service.")

asserted its Title II authority over the provision of such service by requiring that it be unbundled and provided on a nondiscriminatory basis under tariff for the ultimate benefit of consumers.

Today in California, Pacific/SBC, the incumbent LEC, is virtually the only provider of DSL service to residential and small business customers in its service territory. There are few alternate, unaffiliated, facilities-based providers of DSL service. Currently, forty-five percent of Californians who live in cities with broadband service have DSL service as their only broadband option. There are no substitutable broadband alternatives for these customers. In these circumstances, it would be an irrational reversal of longstanding federal policy to allow the ILEC to bundle essential, bottleneck transmission services with Internet information services to escape regulation under Title II, simply based on the transmission technology the ILEC chooses to use.

Indeed, just a few short years ago the FCC rejected the very type of "contamination" theory it proposes to adopt here. In the Frame Relay Order, 10 Rcd 13717 (1995), ¶ 41, AT&T argued that its provision of basic frame relay service, a telecommunications service, combined with protocol conversion service, an information service, rendered the combined service an information service outside the scope of Title II. The FCC squarely rejected the application of the contamination theory to facilities-based carriers, making clear that, as a facilities-based carrier, AT&T was required, pursuant to Computers II and III, to unbundle its basic frame relay service from combined enhanced protocol conversion service, and to offer the former service under tariff. Id.,

¶ 44 and n.73 ("The [FCC] has stated that application of the contamination doctrine to the BOCs would result in an 'improper policy result,'" citing Computer III Notice, FCC 85-397, ¶ 32); see also California v. FCC, 39 F.3d 919, 930 (9th Cir. 1994) (fundamental unbundling is a key safeguard against access discrimination). The FCC further recognized in its Computer III proceeding, in which it adopted unbundling requirements for the provision of information services under Open Network Architecture, that the transmission component of information services does not lose its character as a common carrier telecommunications service subject to Title II, even though the information service itself is not subject to Title II.[10] Accord, Advanced Services Order, 13 FCC Rcd 24011, ¶ 36. The FCC's proposal is an arbitrary departure from its longstanding precedent in order to achieve its desired end.

The FCC's proposal to regulate under Title I an ILEC's combined provision of broadband access services and ISP services as an information service subject to Title I is likewise flawed. In California v. FCC, the Ninth Circuit stated that Title I contains no specific grant of jurisdiction to the FCC. The FCC's Title I authority over enhanced services is ancillary to its Title II authority over interstate common carrier services. 905 F.2d at 1240 n.35. In Computer III, the FCC asserted ancillary authority under Title I over the ILEC's enhanced services because of its continued regulation under Title II of the ILEC's underlying common carrier transmission service upon which the enhanced services rode. Here, by reclassifying the ILEC's underlying transmission service as an

[10] GTE DSL Order, 20.

information service, the FCC has removed the predicate Title II service upon which its Title I authority depends. The FCC's exercise of its Title I authority is thus no longer ancillary to the exercise of any specific responsibilities under Title II, and as discussed, Title I is not an independent source of authority. At a minimum, the FCC must demonstrate, as it did in the Computer Inquiries, how its assertion of Title I authority over ILEC-provided broadband services is ancillary to its traditional Title II concerns against unjust or unreasonable discrimination or unjust and unreasonable rates in the offering of Title II services.. That showing has not been made here.

In the end, the FCC's gyrations used to reclassify broadband transmission services from Title II to Title I result in an arbitrary and capricious reversal of past federal policy. The rationale that justified its longstanding policy continues to apply.

E. The Transport Component of DSL Service Is Not Private Carriage

Acknowledging that an ILEC's provision of unbundled transport may qualify as a telecommunications service subject to Title II, the FCC next asks whether the provision of transport service may nevertheless be classified as "private carriage." The answer is unequivocally no. Under the test for common carriage in NARUC I, the ILEC's practice in selling DSL service is to hold itself out indiscriminately to subscribers, and to offer the service under standardized terms and conditions. When the ILEC sells the DSL service at wholesale to a CLEC for resale, the ILEC is "effectively making this service available to the general public." When the ILEC sells the DSL service to ISPs, whose ultimate

customer is the general public who buys the service under standard terms and conditions, the ILEC is indirectly making available this service to the public as well. In both cases, the offering of DSL service is a common carrier offering.

The ILEC cannot escape regulation of DSL service, currently provided under tariff as a common carrier service, by deciding to enter into private contracts with CLECs or ISPs. If that were allowed, then nothing would prevent ILECs from choosing unilaterally to remove any given tariffed service from common carrier regulation. Frame Relay Order, 10 FCC Rcd 13717, ¶ 52 ("A carrier cannot vitiate its common carrier status merely by entering into private contractual relationships with customers.") Moreover, it would be unduly discriminatory to permit an ILEC to offer DSL service to its own end-use customers either directly or through its affiliate under standardized terms and conditions, while requiring unaffiliated providers to obtain the same service under contractual terms dictated by the ILEC. In addition, nothing would prevent the ILEC from refusing to contract with a competitor altogether.

The FCC does not have "unfettered discretion … to confer or not confer common carrier status on a given entity, depending upon the regulatory goals it seeks to achieve." NARUC I, 525 F.2d at 644. The FCC's prior classification of an ILEC's DSL transport service as a common carrier service is fully consistent with the language, structure and purpose of the 1996 Act. The FCC cannot unilaterally change that classification simply to achieve a desired regulatory goal. Cf. MCI Telecommunications Corp. v. AT&T, 512 U.S. 218, 234 (1994) (FCC's desirable policy goal cannot alter the meaning of the Act).

IV. REGULATORY FRAMEWORK FOR WIRELINE BROADBAND INTERNET ACCESS SERVICES

Based on its tentative proposal to classify wireline broadband Internet access services as "information services" with a "telecommunications input," the FCC asks what regulations, if any, should apply to the provision of these services and this input. Alternatively, the FCC seeks comment on the regulatory obligations that should attach if the transmission component of wireline broadband service is considered a "telecommunications service." The FCC also asks whether it should maintain the framework adopted in its Computer Inquiries governing the provision of these services.

In its Computer Inquiries, the FCC allowed facilities-based carriers to compete in the market for enhanced services so long as they complied first, with structural safeguards and later, with nonstructural safeguards governing their provision. These safeguards were deemed essential to prevent facilities-based carriers from discriminating in favor of their own enhanced services or those of their affiliates; from improperly cross-subsidizing their unregulated enhanced services with regulated services; and from engaging in other anticompetitive conduct and practices. NPRM, ¶ 38. In Computer III, the FCC relieved the facilities-based carrier from the requirement that it structurally separate enhanced service from its regulated operations, and instead required the carrier to unbundle essential network facilities and allow access under tariff under "Open Network Architecture." Other nonstructural safeguards governing accounting, disclosure of network information, and access to customer information were also adopted.

In adopting these safeguards, the FCC properly recognized that the basic transmission service underlying the provision of enhanced services was a bottleneck common carrier facility that the FCC could, and should, regulate to ensure that the BOCs (the facilities-based common carriers) fairly and reasonably competed in offering their own unregulated enhanced services.

Nothing has significantly changed that justifies the removal of the Computer Inquiry nonstructural safeguards. The BOCs continue to maintain exclusive control over essential bottleneck transmission facilities required by competitors for their own information services using wireline broadband technology. As such, the BOCs continue to have the ability and incentive to engage in discriminatory, anticompetitive conduct that favors their own information services. Unless and until the bottleneck is broken by actual, robust competition in residential and small commercial markets from other broadband technologies (intermodal) or from other facilities-based competitors using wireline broadband technology (intramodal), it is premature to eliminate the Computer Inquiry safeguards. The requirement that BOCs unbundle and offer the transmission component of information services under tariff, and acquire such transmission service for their own information services under tariff, must be maintained. This is equally important where BOCs, like SBC, market their DSL services through an affiliate. It would be unduly discriminatory to allow the BOC affiliate to obtain the bottleneck transport service from the BOC on more favorable prices, terms and conditions than those offered to unaffiliated competitors.

A. Access Safeguards

In its NPRM, the FCC seeks comment "on what significance we should place on the extent to which broadband Internet access services can be or are provided over a variety of differentiated network platforms, such as cable, wireless, and satellite." NPRM, ¶ 44.

As previously discussed, the FCC has stated that the relevant geographic market for residential high-speed Internet access services is local. A customer's choice among various broadband technologies (DSL, cable, satellite) is dictated by what is actually offered in his or her area. Merger Order, 16 FCC Rcd 6547, ¶ 74.

Currently, in California the incumbent LECs remain the dominant provider of broadband services to residential and small commercial customers. More specifically, Pacific Bell/SBC controls the vast majority of California's 735,677 ADSL lines,[11] and is virtually the only provider of DSL service in its service territory. More California customers are served by Pacific Bell/SBC's DSL service than by competing cable modem services, and Pacific/SBC's market share is growing. While just two years ago there were several competitors offering DSL service in competition with Pacific Bell/SBC, they have since exited the market, and today, only a single DSL service competitor, partly owned by Pacific Bell/SBC, remains.[12]

[11] Advanced Services Order, FCC 02-339 February 6, 2002).

[12] Pacific Bell/SBC, through SBC's subsidiary SBC Advanced Solutions, Inc. ("ASI"), is by far the largest provider when it comes to DSL market share. ASI's DSL service offerings were initially provided by Pacific Bell and, as a result, ASI has been able to gain and hold market share.

Moreover, while broadband service over cable facilities has been deployed, the availability of this service is far less ubiquitous than DSL service. Because of the high cost of upgrading cable facilities, broadband cable service is limited to suburban residential communities with some spotty coverage within downtown urban areas where the cable plant has been upgraded.[13] Wireless broadband technologies are only sparsely deployed in California, and where available, are generally not price-competitive. Virtually all transport service to the Internet via broadband is thus provided to end users in California by the owner of the transmission facilities – either the ILEC or the cable operator and/or their affiliates.

As noted, today forty-five percent of Californians who live in locales with broadband capability have DSL service as their only broadband option.[14] To the extent that cable modem service is provided, the physical plants do not generally overlap to enable residential customers to have a choice between cable service and DSL service. To date, because cable facilities do not serve many commercial customers, for the small to medium-sized businesses that desire relatively inexpensive broadband service, DSL

[13] According to a 2001 NetAction report, it would take $21 billion to upgrade 50 percent of existing cable networks nationally, and another $31 billion to upgrade the remaining networks. One factor contributing to the high cost of upgrading cable systems is the fact that upgrades often requiring replacement of the old one-way cable with two-way capability. The cost of upgrading California's cable network may be higher than national averages since, California's cable network is older and may require more investment to upgrade. Additionally, California's many densely populated communities substantially increase the time and construction costs associated with upgrades. The fragmented ownership of cable systems in California also makes comprehensive and coordinated statewide cable modem deployment very difficult.

[14] This figure is from data provided by California ILECs and the California Cable and Telecommunications Ass'n to the CPUC. Only 30 percent of the state's population live in communities where both DSL and cable modem services are available. Wireless broadband services are in retreat. Sprint has stopped accepting new customers for its wireless broadband service in California, and the future for its existing customers is unclear.

service generally is their sole option. Wireless technology for Internet access typically is not a viable option due to its limited availability and its inability to meet the service needs of these customers.[15]

Alternate modes of transmission to access the Internet are thus not available to a significant portion of the California population. The ILEC continues to remain the dominant provider of this transmission service with exclusive control over essential bottleneck facilities that underlie the provision of this service.[16] Maintaining existing unbundling and interconnection requirements is therefore critical to ensuring nondiscriminatory and reasonable access to these facilities to promote intramodal competition. California appreciates that in the future, more extensive intermodal and intramodal broadband competition may emerge. However, until it does, the dominant facilities-based provider of DSL service must remain subject to the unbundling and interconnection safeguards of section 251 and the Computer Inquiry currently in place.

California further cautions the FCC not to permit an unregulated duopoly in the few areas where competition may exist between facilities-based providers of DSL service and cable modem service. Not only would an unregulated duopoly framework detrimentally affect consumers by causing higher prices and fewer service options, but it

[15] Large businesses have greater bandwidth needs, such as dedicated frame relay or ATM networks to connect multiple sites, and may require integrated solutions of voice/data/video services at DS3 or OC3 speeds. Cable modem service is not an alternative in this market. Fixed wireless service likewise is not an option because of the line-of sight issues, and satellite service is not widely available to date and is far more costly than DSL or cable modem service.

[16] See in general California's Reply Comments in CC Docket No. 01-337 discussing ILEC-dominance over the California broadband market.

is contrary to Congress' intent to make broadband services widely available and affordable.

The case of cellular service is instructive. The FCC initially established an unregulated duopoly framework for cellular service, which led to very high prices. The mere threat of competition from PCS and other spectrum options was not enough to discipline these prices. Only when these alternatives were actually offered and became widely available did cellular prices begin to soften and more service options become available. Moreover, it is significant that, as a matter of public policy, cellular service originally was viewed as a premium, discretionary service, so that high prices and fewer options could be tolerated. The opposite is true for broadband services. In section 706, Congress provided for the widespread availability "to all Americans" of advanced telecommunications services that would lead to affordable – i.e., lower – prices and greater service choices. Congress thus viewed broadband service as essential.

Further, the assumption that potential competition in the future should discipline prices charged by broadband providers is belied by recent history. Five years ago, Pacific Bell/SBC faced three other major competitors for DSL service in California. Today, there is only one competitor, and that one is partly owned by Pacific/SBC. The degree of competition has thus substantially dwindled, not expanded in recent years, leaving customers with fewer choices or, for others, without a choice at all. Moreover, in the last year and one half, Pacific/SBC has increased the price for its DSL service by 25

percent.[17] At the same time, Pacific/SBC has slowed the deployment of its DSL service.[18] These factors thus rebut any assumption that market conditions have changed, or can be expected to change in the near term, so as to justify the removal of existing safeguards applicable to the dominant provider of the predominant type of broadband services in California.

In its NPRM, the FCC suggests that the Computer Inquiry safeguards may no longer be relevant to services offered over broadband technology rather than the narrowband technology in place at the time these safeguards were adopted. NPRM, ¶ 47. California submits that the critical question is not whether the technical characteristics of the network dictate a different regulatory regime (indeed, the 1996 Act precludes distinguishing telecommunications services based on technology), but whether the BOCs continue to maintain bottleneck control over network facilities that are essential to the provision of broadband services by competitors. If so, then the safeguards requiring the unbundling and interconnection must be maintained for the very same reasons that they were initially imposed.

The FCC next asks whether it should remove the Computer III requirements once a BOC receives authority under section 271 to provide long distance service. NPRM, ¶ 48. California opposes this proposal. Allowing a BOC to close down its network to competitors as soon as the FCC certifies that the BOC has opened its market to

[17] In February, 2001, Pacific Bell/SBC increased the price for residential DSL service from $39.95 to $49.95.

[18] See Convergedigest.com, 10/22/01, "SBC to Slow Its Broadband Network Deployment";

competition would thwart the purpose of section 271. So long as the BOC has market power, the Computer III safeguards should be neither relaxed nor removed. Indeed, Congress stated as much in section 160(d) by providing that the FCC may not forbear from applying the requirements of section 251(c) and 271(a) until they have been fully implemented. At a minimum, the FCC would need to undertake periodically a comprehensive review to ascertain whether the BOC continues to remain dominant in its provision of last-mile facilities.

The FCC asks further whether it should replace the standard of cost-based pricing or tariffed rates under section 251 and the Computer Inquiries, respectively, with a standard of "market-based prices" or "commercially reasonable rates." As discussed, wireline service remains the sole means of transport to the Internet for the majority of customers in California. A standard of "market-based" or "commercially reasonable" rates not only is too vague and ill-defined, but it provides little, if any, assurance of promoting the goals of the 1996 Act of lower priced services and greater customer choice through viable competition. The FCC should not eliminate the requirement that a facilities-based LEC make broadband transmission service available to non-affiliated ISPs under tariff on a nondiscriminatory basis. A facilities-based LEC should likewise continue to offer to CLECs interconnection to broadband transmission services at cost-based prices pursuant to sections 251 and 252 of the Act.

Broadband.com, 10/10/01, "SBC Takes Pronto Out of DSL Buildout Pace."

An approach that allows an ILEC to rely on negotiated commercial agreements with CLECs and ISPs for broadband transmssion service is also ill-advised. At best, such an approach would allow only the largest CLECs or ISPs unaffiliated with the ILEC to enter into contracts at the expense of innovative, smaller CLECs and ISPs, to the detriment of customers whose choices would be circumscribed. California therefore does not support an approach that relies solely on negotiated agreements.

Specifically, a negotiated approach would allow an ILEC to negotiate more favorable agreements with its own affiliates, or even larger unaffiliated ISPs who could potentially add a large number of customers to the ILEC's Internet access market at the expense of smaller, unaffiliated ISPs. Not only would smaller ISPs themselves be disadvantaged, but this approach would also limit the customer's choice of ISP and limit innovation in the marketplace that smaller ISPs tend to bring.

In addition, while a nondiscrimination provision could be required, this would not be enough to ensure reasonable agreements. This is because the ILEC could negotiate excessively high rates with its affiliated ISP that would be made available to the unaffiliated ISP on a nondiscriminatory basis. The excessive rates would undoubtedly harm unaffiliated ISPs, particularly smaller ISPs with limited resources.

In the end, so long as the LEC remains dominant in its provision of bottleneck transmission services, the incentive and ability to restrain competition persists. It is therefore essential that the FCC retain the existing Computer Inquiry and other statutory safeguards to mitigate these harms.

The FCC seeks comment on how a regulatory framework, if deemed necessary, could reduce the regulatory burden on wireline broadband providers while promoting the availability of broadband service to both competitors and consumers. NPRM, ¶ 51. California submits that the existing regulatory framework, based on the statutory requirements described above, has not been demonstrated to be unduly burdensome. Congress has made clear that the public policy benefits of having an open telecommunications network warrant additional costs that may arise due to the obligations imposed on ILECs. Experience in the cable modem service arena makes clear that a hands-off, "market-based" approach cannot be relied upon at this stage of broadband development to ensure that carriers meet their market-opening obligations.

The FCC also asks for comment on the incentives that could be created by the imposition of requirements other than those under the Computer Inquiries in providing wireline broadband Internet access service. NPRM, ¶ 52. Again, as the experience with cable modem service demonstrates, there is no reason to expect that ILECs would voluntarily provide broadband transmission over last-mile facilities to competing ISPs or CLECs.

B. Other Obligations

The FCC seeks comment on how other obligations might be affected by its classification of wireline broadband services as information services. NPRM, ¶ 54. Among other things, the FCC asks how this classification will affect consumer protection requirements, safeguards against slamming, truth in billing guidelines, access to service

by the disabled, and access to customer proprietary network information. The FCC further asks whether the presence of competitive alternatives for wireline broadband services obviates the need for regulatory intervention to safeguard consumer interests.

As a general matter, by removing wireline broadband transmission services from common carrier regulation, the FCC eliminates the panoply of safeguards otherwise applicable to these services. As discussed, California believes that the reclassification of these services is directly contrary to the 1996 Act. Cognizant of the pre-existing Computer Inquiry and MFJ equal access requirements applicable to dominant, facilities-based carriers, Congress clearly intended to continue common carrier regulation of bottleneck transmission services provided by these carriers in order to achieve the principal goals the 1996 Act – greater choice of services for consumers at lower prices through competition.

At the same time, Congress recognized that once robust competition occurred for telecommunications services like transmission, the FCC could forbear from asserting its common carrier regulation. The FCC's reclassification of essential transmission services impermissibly short circuits this statutory framework. As California has demonstrated, robust competition for broadband services does not presently exist in California, and the ILEC remains the sole or dominant provider of broadband transmission services to a substantial portion of California's population.

Significantly, as voice traffic migrates to broadband transmission technologies, all of the consumer protections attendant to even the most basic common carrier voice

service will no longer automatically apply if the FCC deems the broadband services to be non-common carriage. These protections include the assurance of fair and reliable service at just and reasonable rates; the assurance of just and reasonable terms and conditions of service, such as billing and service termination practices; and the assurance of compliance with basic service quality standards. The FCC's reclassification of broadband services as information services turns the Communications Act on its head.

The FCC's reclassification also undercuts additional goals that Congress intended to achieve. Congress recognized that common carrier regulation of essential, bottleneck services was necessary to ensure that low-income customers, customers in high-cost areas, and disabled customers have reasonable and affordable access to the network. 47 U.S.C. §§ 254, 255. Congress further sought to ensure that confidential customer information would be safeguarded from disclosure. 47 U.S.C. § 258. All of these provisions, however, apply solely to "telecommunications services."

In short, nothing in the Act demonstrates an intent by Congress to leave it to the FCC, in its sole discretion under its vaguely-defined authority under Title I (a provision that is not a specific grant of jurisdiction) to decide unilaterally whether and how to regulate essential bottleneck transmission services to further the Act's goals. Nor is it clear how the FCC could simply assert its Title I ancillary authority to extend basic consumer protections applicable to Title II services to Title I services.

The FCC next seeks comment on how its proposal affects the incumbent LECs' obligation to provide access to network elements under sections 251 and 252 of the Act.

Because section 251(c)(3) only requires telecommunications carriers to provide unbundled access for the provision of telecommunications service, it appears that the FCC's approach would eliminate this critical statutory provision as it applies to broadband transmission. The statutory underpinnings of the FCC's line sharing and line splitting rules would disappear. Consistent with California's view that wireline broadband transmission should be made available as a telecommunications service, the FCC should not bar a carrier that leases unbundled network elements for telecommunications services pursuant to section 251 from using these elements to provide wireline broadband Internet access service. A CLEC should be allowed to use the network elements to provide DSL service to any end user, including an ISP.

C. Impact on Federal and State Responsibilities

In California v. FCC, the Ninth Circuit held that section 152(b) of the Act does not restrict the states to regulating only common carrier services offered by a telephone carrier. To the contrary, section 152(b) by its terms broadly permits states to regulate services "for or in connection with" communications services provided by telephone carriers. 905 F.2d at 1239-1240. The court went on to find that states have the authority to regulate the intrastate enhanced services offered by a telephone carrier. Id. at 1240-41. "That these enhanced services are not themselves provided on a common carrier basis is beside the point. As long as enhanced services are provided by communications carriers over the intrastate telephone network, the broad 'in connection with' language of § 2(b)(1) places them squarely within the regulatory domain of the states." Id. The Court

further stated that the state's authority over intrastate communications services in section 152(b) is the same as the FCC's authority over interstate communications services in section 152(a). Id. at 1241-1242, citing Nat'l Ass'n of Regul. Util. Comm'rs. v FCC, 880 F.2d 422 (D.C. Cir. 1989).

Against this backdrop, states may continue to regulate a telephone carrier's provision of intrastate information and transmission services. In particular, to the extent that a telephone carrier offers intrastate voice service via broadband wireline transmission technology, states would continue to have authority to regulate all aspects of it, including rates, service quality, and other terms and conditions of service, even if the FCC classifies the services as information services for federal purposes.

V. UNIVERSAL SERVICE OBLIGATIONS OF ALL PROVIDERS OF BROADBAND INTERNET ACCESS

In its NPRM, the FCC asks whether facilities-based providers of broadband Internet services should be required to contribute to federal universal service programs. The FCC also seeks comment on how any obligation to contribute to universal service can be administered in an equitable and non-discriminatory manner. NPRM, ¶ 66.

As the FCC notes, under its existing rules and policies, telecommunications carriers providing telecommunications services, including broadband transmission services, are subject to federal universal service contribution requirements. The FCC, however, does not require facilities-based ISPs that lease telecommunications facilities and transmission from telecommunications carriers to contribute to federal universal

service programs. The FCC asks whether this policy should be changed. In addition, the FCC asks how to sustain universal service as traditional voice services migrate to broadband platforms.

Facilities-based providers of broadband Internet services – both wireline and cable – can and should be required to contribute to universal service. While a substantial portion of universal service funding goes to support voice telecommunications services, the schools and libraries program provides support for Internet access. There is no reason why universal service support for Internet access should be funded solely through assessments on providers of voice telecommunications. If the FCC maintains the Computer Inquiry safeguards, as California recommends, universal service contributions can continue to be assessed on the basis of the tariffed rates for the telecommunications services used as inputs to the Internet access services. The same structure should also be created for cable providers which offer functionally equivalent broadband services.

The FCC next asks parties to comment on the ways in which reform of the current contribution methodology might alter its analysis of the proper treatment of wireline broadband Internet access. NPRM, ¶ 67. As discussed in our comments in CC Docket No.96-45 et al., filed April 22, 2002, California opposes a connection-based universal service assessment mechanism. Such a mechanism would unfairly shift more of the burden of supporting universal service to low-usage residential end users. This type of mechanism would also create administrative problems and arbitrage opportunities for multi-line business customers. Regardless of the universal service assessment

mechanism, removal of the requirement that incumbent LECs maintain non-discriminatory, tariffed broadband service offerings would make it more difficult to extract universal service contributions from incumbent LECs that self-provide transmission for broadband Internet services.

The FCC further seeks comment on whether voice traffic will migrate to broadband Internet platforms, and the impact of such migration on universal service support. NPRM, ¶ 82. Deregulating self-provisioned broadband Internet services would encourage the migration of voice traffic to wireline broadband Internet platforms, even compared to other broadband platforms. Deregulation would favor the ILECs' use of the Internet for voice traffic, rather than the development of their own packet-switched networks, since the transmission of voice over the Internet would be treated as an unregulated information service. In contrast, voice transmission over an ILEC's own packet network would continue to be regulated as a telecommunications service. At the same time, despite the fact that an ILEC-controlled packet network currently can provide higher-quality voice service than service over Internet-based transmissions, the ILEC would have an incentive to favor the lower quality technology for its voice traffic to escape regulation.

Another significant issue is how carriers would receive universal service support if voice migrates to deregulated, broadband Internet platforms. Carriers in high cost areas and low-income customers would be discouraged from migrating their voice traffic to broadband Internet platforms if to do so means the loss of universal service support.

Such an outcome would exacerbate the digital divide between wealthy and less-wealthy population segments.

The FCC seeks comment on how to ensure that services supported by universal service bear no more than a reasonable portion of the costs of facilities used to provide both supported and unsupported Internet access. NPRM, ¶ 83. The FCC's proposal would treat broadband transmission through last-mile facilities variously as a deregulated information service, as deregulated telecommunications, or as a regulated telecommunications service, depending on who uses the transmission capability and how it is provided. This polyglot approach would needlessly complicate the cost allocation process and increase the likelihood that a carrier could allocate more than a reasonable portion of its facilities costs to services supported by universal service funding. This is just one more reason why the FCC should not adopt the proposal set forth in the NPRM.

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VI. CONCLUSION

For all the reasons discussed, California respectfully submits that the FCC's proposal to reclassify the transmission component of Internet access service from a telecommunications service to an information service is contrary to law and not supported by sound public policy.

Respectfully submitted,

GARY M. COHEN
LIONEL B. WILSON
ELLEN S. LEVINE

By: /s/ ELLEN S. LEVINE
_____
ELLEN S. LEVINE

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May 3, 2002

ATTACHMENT 2

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	
Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities	GN Docket No. 00-185
Internet Over Cable Declaratory Ruling	
Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities	CS Docket No. 02-52

COMMENTS OF THE PEOPLE OF THE STATE OF CALIFORNIA AND THE CALIFORNIA PUBLIC UTILITIES COMMISSION

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Public Utilities Commission
of the State of California

June 17, 2002

I. INTRODUCTION

The People of the State of California and the California Public Utilities Commission ("California") respectfully submit these comments in response to the Notice of Proposed Rulemaking ("NPRM"), released March 15, 2002, by the Federal Communications Commission ("FCC") in the above-captioned proceedings. In its NPRM, the FCC seeks further comment regarding the appropriate regulatory framework that should govern the provision of cable modem service. In its companion Declaratory Ruling, the FCC has classified cable modem service as an interstate information service under the Telecommunications Act of 1996 ("1996 Act" or "Act").[1]

Previously, on September 28, 2000, the FCC issued a Notice of Inquiry ("NOI") in which it sought comment on the appropriate legal and policy framework to govern cable modem service. California actively participated in that proceeding, and urged the FCC to classify cable modem service as partly a common carrier telecommunications service, and to adopt an open access regime to enable end users using cable modem service a choice of ISPs.

In this NPRM, the FCC acknowledges the extensive record developed in the NOI on the FCC's "authority to regulate cable modem service, as well as the costs

[1] The FCC's Declaratory Ruling is currently the subject of review in Brand X Internet Services, et. al. v. FCC, Case No. 02-70518 et.al., U.S. Court of Appeals for the Ninth Circuit. California is a petitioner in this appeal.

and benefits of imposing a multiple ISP requirement on cable operators." NPRM, ¶ 72. The FCC, however, seeks additional comment on these issues in light of its initiation of the Wireline Broadband NPRM, in which the FCC asks for comment on the legal and regulatory implications of its proposal to reclassify broadband service using wireline facilities as an interstate information service.[2] In particular, the FCC seeks comment on whether it is "necessary or appropriate at this time to require that cable operators provide unaffiliated ISPs with the right to access cable modem service customers directly." NPRM, ¶ 72. The FCC further states that to the extent that the transport component of cable modem service is subject to common carrier regulation, the FCC seeks comment on its proposal to forbear from applying such regulation. Id., ¶ 95. Among other things, the FCC tentatively concludes that enforcement of Title II common carrier provisions is not necessary for the protection of consumers or to ensure just, reasonable and nondiscriminatory terms and conditions of service. Id. and ¶ 108. In addition, the FCC seeks comment on whether it should preempt any specific state or local regulation of cable modem service. Id., ¶ 99.

For the same reasons set forth in California's comments on the FCC's NOI, California urges the FCC to adopt an open access regime for cable modem service.

[2] California filed comments in the FCC's Wireline Broadband NPRM, urging the FCC to maintain its classification of DSL and other broadband services using wireline facilities as a telecommunications service, and to maintain the Computer II regulatory framework and other requirements of the 1996 Act for these services.

California further urges the FCC not to forbear from regulating the transport component of cable modem service as common carriage under Title II of the Act. The adoption of an open access regime and the regulation of cable modem transport under Title II are essential to meet the core policies of the 1996 Act – enhanced consumer choice of services at lower prices, and the offering of services on just, reasonable, and nondiscriminatory terms.[3]

II. DISCUSSION

In Computer II, the FCC recognized that basic transport services underlying the provision of information services were bottleneck services that the FCC could, and should, regulate to ensure that incumbent local exchange carriers fairly and reasonably competed in offering their own unregulated information services. The FCC thus required that these facilities-based carriers unbundle and offer the transmission component of information services under tariff, and acquire such transmission service for their own information services under tariff. These requirements have been extended to the incumbent carrier's provision of DSL service.

Cable operators offering cable modem service, either directly or through affiliated ISPs, are facilities-based carriers. Nationally, thirty-eight percent of residential customers who reside in areas where broadband service is available have

[3] A copy of California's comments on the NOI are attached hereto.

access solely to cable modem service.[4] While DSL service offered by the incumbent telephone companies is the predominant method of broadband access to the Internet for the majority of residential customers in California, there are several areas where millions of California residents have access to the Internet solely via cable modem service. These areas include mid-sized cities like Fresno, California. In such areas, to the extent that DSL service is also provided, the physical plants do not generally overlap. As a result, these residential customers do not have a choice between cable modem service and DSL service. Nor do other viable broadband transmission service alternatives exist.[5]

In these circumstances, the FCC should require, pursuant to Computer II, that cable operators unbundle and offer on nondiscriminatory and reasonable terms the transport component of cable modem service to end users or unaffiliated ISPs.[6] As

[4] JP Morgan/McKinsey & Co., *Broadband 2001*, April 2, 2001, Chart 25.

[5] Broadband transmission service via fixed wireless and satellite technologies is not widely deployed and is available only on a limited basis in certain areas in California. In addition, rates charged for broadband service via satellite are significantly higher than for DSL and cable modem services. *The Status of Telecommunications Competition in California*, June 5, 2002 (Prepared by the California Public Utilities Commission).

[6] In AT&T Corp. v. City of Portland, 216 F.3d 871 (9th Cir. 2000), the Ninth Circuit correctly classified the transport component of cable modem service as a common carrier transmission service under Title II. California questions how the FCC could regulate cable modem service under its ancillary jurisdiction under Title I if the FCC believes that cable modem service is entirely an information service. NPRM, ¶78. In California v. FCC, 905 F.2d 1217, 1240 n.35, the Ninth Circuit made clear that Title I does not contain a specific grant of jurisdiction to the FCC. The FCC's Title I authority over cable modem service must be ancillary to the exercise of specific statutory responsibilities contained in another title of the Act. Id. Other than citing general goals in the Act, the FCC has not identified any specific responsibilities to which its assertion of authority over cable modem service would be ancillary.

discussed in California's comments in the NOI, there is no reason to expect the facilities-based cable modem service provider to interconnect with unaffiliated ISPs and provide nondiscriminatory access to its transport services over cable facilities without regulatory intervention. Nothing has significantly changed to alter that expectation. Cable modem service providers still do not enable customers to purchase transmission capability separately, and, except pursuant to mandated merger agreements, cable providers still do not offer unaffiliated ISPs nondiscriminatory access to last-mile cable transport facilities. The Computer II requirements applicable to facilities-based providers of essential transmission capability is therefore critical to further the consumer and competition policies underlying the Act. Forbearance at this stage would not be appropriate. Unless and until vigorous competition among facilities-based broadband service providers becomes a reality such that consumers enjoy a wide variety of service choices at lower prices, it is premature to forbear from regulating cable modem transport service.

To be sure, customers who have no viable broadband transmission options other than cable modem service may be harmed in additional ways if the FCC forbears from regulating the transport component of this service as common carriage. As voice and other services migrate to cable broadband technology, these customers will have no guarantee that the price that the cable operator charges for connectivity to the Internet will be just and reasonable. They will have no guarantee

that the cable operator will comply with reasonable termination and billing practices, or conform to specified service quality standards. If the customer is disabled, he will have no assurance that the cable operator will provide him with affordable and reasonable access to the cable network to place his calls. Low-income customers and customers residing in high-cost areas will likewise have no assurance of affordable access to the cable network. Congress intended to maintain basic consumer protections and enhance consumer's choices when providers of information services own or control the essential transmission facilities upon which these services are provided. Forbearance is thus inconsistent with congressional intent.

California further urges the FCC not to preempt state authority over intrastate services offered via cable modem facilities. California is aware of no state laws or regulations that have impeded the development of cable modem service.

III. CONCLUSION

For the reasons discussed here and in California's comments on the FCC's NOI, California respectfully urges the FCC to adopt an open access regime for cable modem service and to regulate the transport component of cable modem service under Title II. These measures are essential to secure, through competition,

enhanced consumer choices of high quality services at lower prices, as Congress intended under the 1996 Act.

Respectfully submitted,

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June 17, 2002

ATTACHMENT

ATTACHMENT 3

ALJ/PSW/k47

Mailed 2/19/2004

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order instituting investigation on the Commission's own motion to determine the extent to which the public utility telephone service known as Voice over Internet Protocol should be exempted from regulatory requirements.	FILED PUBLIC UTILITIES COMMISSION FEBRUARY 11, 2004 SAN FRANCISCO OFFICE INVESTIGATION 04-02-007

ORDER INSTITUTING INVESTIGATION

Summary

By this order we initiate an investigation to consider the appropriate regulatory framework that should govern the provision of Voice over Internet Protocol telephony (VoIP). VoIP is a service using Internet technology that is utilized today by business and residential customers. In offering ubiquitous real-time, point-to-point voice service, VoIP competes with traditional providers of voice telephony, including incumbent telephone companies (ILECs), competitive local exchange carriers and cable telephony providers. At the same time, the ILECs and cable operators themselves have deployed, or have announced plans to deploy, VoIP on a commercial basis to business and/or residential customers over the next few years. Many of these providers, such as SBC and TimeWarner, are actively migrating customers to VoIP technology. Recently, Time Warner filed an application with the Commission to provide local and intrastate VoIP service in California. VoIP represents the next generation technology for the provision of voice and other services.

Providers of Internet-based voice communications may face very few barriers to entry into the local and long-distance telecommunications markets. Those who are not existing providers (i.e., cable, interexchange and local exchange carriers) represent an entirely new class of potential competitors to existing telephone service providers. VoIP providers assert that they enjoy cost advantages over other providers because they need not build expensive switching facilities, can use the existing Internet infrastructure to handle voice transmissions originated by their customers, and are not required to amortize historic fixed costs. In addition, VoIP providers do not pay the same fees and charges applicable to other providers. VoIP providers often charge lower rates than either ILECs or CLECs. The potential benefit to consumers from the entry of VoIP providers may be significant.

Some VoIP providers also offer their customers features unavailable from an existing wireline telephone provider or reseller, for example, the ability to make and receive a phone call from the same number and at no additional charge from any high-speed Internet connection in the world.

As VoIP is offered to the mass market, major public policy issues arise. These include the impact of VoIP on critical universal service programs designed to ensure accessible and affordable telephone service to low-income customers, customers in high-cost and rural areas, and to disabled customers; VoIP's ability to address public safety and reliability concerns; VoIP's impact on intercarrier compensation for use of the Public Switched Telephone Network (PSTN); VoIP's impact on rapidly dwindling numbering resources; and VoIP's impact on a fair, competitive telecommunications market for all providers. As regulators, we must address and carefully consider these public policy issues in a manner that balances the interests of providers, consumers and competitors alike. In striking

the appropriate balance, we are mindful of the need to minimize regulation so as not to stifle the continued development of VoIP service while simultaneously fulfilling our responsibilities under state law to realize state-mandated policies and objectives on behalf of all California consumers.

Even as some public policy problems arise, other major problems may go away. For example, "slamming," the illegal switching of customers, becomes difficult and perhaps impossible. As a result, regulations aimed to protect consumers from slamming may be unnecessary for VOIP providers.

What is VoIP: VoIP is a public utility telecommunications service that delivers voice and other related services using Internet Protocol (IP) technology. IP is a type of digital transmission technology over which services are provided. Voice using IP is a substitute for voice using traditional digital protocols, such as Time Division Multiplexing (TDM). VoIP is similar to digital protocol interfaces of two decades ago enabling existing customer telephone equipment to transmit voice calls under a new and different protocol. In both cases, the customer's analog voice signal is converted into a digital format and transmitted as data to the point of termination, at which point the voice is converted back to an analog format. In both cases, there is no net change in form or content of the voice message, and no net protocol conversion. VoIP providers offer a telephone number and a network translator device to the customer.

Like voice transmitted using TDM digital protocol, VoIP transmissions interconnect with the PSTN and utilize telephone numbers from the North American Numbering Plan (NANP). VoIP requires a customer to have a high-speed connection to the Internet. Typically, this connection is either a Digital Subscriber Line (DSL) offered by the incumbent telephone company, a

competitive local exchange carrier or a high-speed cable line offered by cable operators. While these high-speed services require their own continuous electric supply (and supply their own backup), VoIP service itself is dependent on the customer also having a continuous supply from their electric service provider to power the network translator device, which is generally not connected to a computer. VOIP providers may take the same route and include battery backup to maintain service.

VoIP may be provided between computers, between a standard telephone and a computer, between a computer and a standard telephone, or between two standard telephones. With the exception of computer-to-computer transmissions, all other transmissions interconnect with the PSTN.

Viewing VoIP functionally from the end-user's perspective, and consistent with definitions in the Public Utilities Code, we tentatively conclude that those who provide VOIP service interconnected with the PSTN are public utilities offering a telephone service subject to our regulatory authority. Under Section 216(a) of the Public Utilities Code, a "public utility" includes "every telephone corporation ... where the service is performed for ... the public or any portion thereof." Under section 234(a), a "telephone corporation" includes "every corporation or person owning, controlling, operating, or managing any telephone line for compensation within this state." Section 233 defines a "telephone line" to include "all conduits, ducts, poles, wires, cables, instruments, and appliances, and all other real estate, fixtures, and personal property owned, controlled, operated, or managed in connection with or to facilitate communication by telephone, whether such communication is had with or without the use of transmission wires." Against this statutory backdrop, to the

extent that a VoIP provider holds itself out to the public to offer for a fee voice telephony on a local or intrastate basis, it appears to qualify as a public utility telephone corporation in California. Cf. Commercial Communications, Inc. v. Public Utilities Commission, 50 Cal. 2d 512 (1958).

Our preliminary analysis suggests that similar to federal law, it is the functional nature of the service offered, not the technology used to deploy the service that determines whether a service qualifies as a public utility service under state law.[1] From an end-user's functional standpoint, the subscriber controls the form or content of the information sent and received when placing real-time, point-to-point voice calls anywhere the subscriber chooses. Placing such calls using IP technology does not appear to alter the fundamental character of the voice telephone call from the end user's standpoint.[2]

Penetration of VoIP: Penetration by VoIP providers into the voice telephony market is growing rapidly. Our Telecommunications Division (TD) has projected the penetration of VoIP over the next five years. Based on conservative estimates, by 2008 TD projects that VoIP will account for 40 percent to 43 percent of total intrastate telecommunications revenues in California. These projections assume no change in the number of residential and business access lines, and assume conversion rates from conventional voice service to

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[1] Cf. 47 U.S.C. §§ 153(46) & 706.

[2] The IP technology used to transport a voice transmission is completely transparent to the calling and called parties. And, from the end users' standpoint, there is no net change in the form or content of the voice communication sent and received. Any protocol conversion utilized is merely to facilitate the provision (i.e., call set-up, routing) of the basic, voice service. Cf. 47 U.S.C. § 153(20) exempting from the definition of "information service" capabilities "for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications" used for "the management, control or operation of a telecommunications system, or the management of a telecommunications service."

VoIP service of 10 percent for cable/residential; 5 percent for ILEC/residential; and 10 percent for ILEC/business. A copy of TD's projections is attached.

Currently, both SBC and Verizon are offering VoIP service to customers. As noted, Time Warner filed an application for operating authority with the Commission in order to offer VoIP on a local, intrastate basis to customers in California. Other providers in California include Vonage, 8X8, and Level 3 Communications.

Current Regulatory Framework: To date we have not enforced the same regulatory regimen on VoIP providers as we have for those who provide telecommunications services which do not use the Internet as a primary component of call delivery. VoIP providers therefore have not generally obtained operating certificates nor have they filed tariffs governing the terms and conditions of service, including those requiring reasonable customer notice prior to discontinuance of service and those protecting the customer's proprietary information. VoIP providers claim that they do not offer a public utility telephone service. As a result, VoIP providers also have not contributed directly to California's universal service funds, have not provided E911 service, and have not compensated ILECs via access charges for their origination and/or termination of VoIP calls on the PSTN. VoIP providers moreover have not provided access to telephone traffic records for law enforcement. In addition, VoIP providers have not obtained telephone numbers as carriers from the NANP Administrator, but have instead acquired them as customers of regulated carriers as do end-users of telephone service. We discuss a few of these areas in more detail below.

Impact of IP Telephony on Universal Service Programs: TD projects that by 2008, given current VoIP penetration rates, between $183 and $407 million in revenue will no longer be available to support California's five statutorily mandated universal service programs if the support for these programs continues to rely on surcharges placed on regulated revenues. These "public purpose" programs are the California High Cost Funds A and B, the Universal Lifeline Fund, the Deaf and Disabled Telecommunications Fund, and the California Teleconnect Fund for schools, libraries, rural health clinics and community-based organizations. Attached are TD's projections of the dollar impact of VoIP penetration on each of these programs. As the attachment shows, nearly half of the funding base needed to supported the state's mandated universal service programs may be lost if VoIP providers do not contribute program funds.

Impact of IP Telephony on Access Charges: Access charge payments represent 30 percent to 50 percent of intrastate revenue for small, rural local exchange carriers in California. Further, access charge payments represent about 30 percent of revenues of large telephone companies in California, which are used to offset a portion of the cost of basic telephone services offered by those companies. Revenue from access charges helps maintain affordable rates for telephone service in high-cost rural areas of the state. Because VoIP providers do not currently contribute to the payment of access charges, and if the current regulatory access charge scheme remains unchanged, sharp increases in VoIP growth could result in:

1. an accelerated consumer transition from services subject to access charges, such as toll services, to VoIP services.
2. a diminution of access and toll revenues, thereby reducing regulated revenues.

3. increases in regulated service prices, such as basic service, to offset regulated revenue reductions.
4. steep increases in public program surcharges to ensure basic telephone service is affordable in rural, high-cost areas of the state, because these customers cannot afford broadband connectivity or are currently beyond the reach of broadband networks.

Impact of IP Telephony on Public Safety: In California, years of state funded improvements have been made to 911 service to enable telecommunications providers and first responders to ensure the safety of California customers. In addition, law enforcement utilizes its right under federal law to monitor telecommunications services to combat criminal activity. Exempting VoIP providers from regulation raises concerns about public safety and law enforcement activities in local communities. On the other hand, VoIP technologies offer the possibility to provide more detailed emergency information about some user locations, e.g. PBX users, than available with current technology.

Impact of IP Telephony on Consumer Protection: Regardless of the type of telecommunications service they use, customers expect that basic consumer protections will be in place to safeguard their interests. For example, consumers expect clear and legible bills, access to live representatives to discuss billing and other questions, reasonable advance notice for termination of service, protection of proprietary information, and protection against cramming. VoIP providers are currently not being required to comply with Commission adopted regulations.

In addition, VOIP service relies on customer premises equipment which depends on a continuous power supply to remain reliable. Thus, to the extent that customers replace their conventional voice service with VoIP service, customers may not be aware that VoIP service could be terminated during a power outage, absent power back-up systems present on the PSTN.

Impact of VoIP on Numbering Resources: Federal and state regulators have been successful in slowing the explosive growth of new area codes. Each new area code places additional costs on businesses, adds complexity to the lives of residential consumers, and is inconvenient for all telephone customers. Under Federal Communications Commission (FCC) leadership, California has developed an effective set of rules that ensure that telecommunications providers receive the number they need and makes telecommunications providers efficiently utilize the number they have. VoIP providers currently utilize telephone numbers, but under FCC rules, they do not currently have to comply with protocols under the NANP, thereby potentially undercutting the concerted effort of regulators and carriers subject to the plan to manage scarce numbering resources.

In many ways, the issues presented by VoIP mirror those once presented by wireless providers. Wireless providers, like VoIP providers, offer nationwide service that is portable to the subscriber. Wireless providers, however, register with the California Public Utilities Commission, contribute to state (and federal) universal service programs, pay access charges for interconnection with the PSTN, are required to provide E911 service, and must comply with NANP protocols.

We have adopted different regulatory frameworks for various types of public utility communications services. These include:

1. The traditional cost of service approach applied to the regional carriers, such as Evans, Pinnacles or Volcano, which ties rates to costs, imposes close scrutiny of operations, and limits profits,
2. The "New Regulatory Framework" price cap approach applied to the larger incumbent carriers, including SBC, Verizon, Surewest and Frontier, which severs the link between operating costs and prices, shares profits and generally eliminates overview of operations,
3. The light handed approach we have applied to competitive carriers, such as AT&T, MCI and Sprint, which entails no downward price regulation and under which a carrier applies for and is granted authority to enter the marketplace, files pro forma tariffs (unless it elects not to do so in some cases), alerts the Commission and its customers if it expects to discontinue service, and like other carriers more rigorously regulated, submits annual reports with basic information comparable to that filed with the Securities and Exchange Commission,
4. The oversight approach applied to wireless carriers, such as Cingular, Verizon Wireless, AT&T Wireless and Sprint, under which the carrier submits a short registration form with the Commission, does not file tariffs, experiences no economic regulation, and makes no financial reports.

All carriers follow our rules for consumer protection, collect and remit public program surcharges, and comply with all other applicable statutes.

We are mindful of the fact that all of these regulatory frameworks impose some level of costs but they also confer benefits. Some of these costs and benefits may easily be quantified, but we recognize that many may not be.

Scope of OII: VoIP promises to offer great benefits to many Californians. At the same time, VoIP presents major public policy issues that require further examination. We must carefully consider the impact that VoIP will have on the

funding base for universal service programs that serve California's low-income customers and customers in high cost and rural areas, and on programs that ensure reasonable access to disabled customers. We must also consider the impact if VoIP does not pay access charges, thus not offsetting the network costs otherwise borne by customers who lack access to VoIP due to the absence of high-speed Internet access service in their regions. We are further concerned about public safety and reliability issues that VoIP presents by not offering ubiquitous E911 service, and by not remaining functional during power outages. In addition, given the depletion of scarce numbering resources in California in the past several years, particularly in Southern California, we must consider the impact of VoIP providers not being subject to NANP protocols. VoIP also presents issues of customer privacy, customer notice for discontinuance of service, cramming and slamming.

By this Order Instituting Investigation (OII) we wish to explore these issues in more depth and determine the appropriate regulatory framework that should apply to VoIP. We therefore seek information on the following issues:

1. Whether VoIP providers should be required to contribute directly to state universal service programs.
2. Whether VoIP providers should be required to provide E911 service at this time, and, if so, how.
3. Whether VoIP providers should be required to pay access charges to interconnect with the Public Switched Telephone Network.
4. Whether to recommend to the FCC that VoIP providers should be required to comply with the NANP protocols.
5. Whether VoIP providers should be subject to basic consumer protection rules, such as those governing disclosure of terms and conditions of service, billing information, customer privacy, service termination, and slamming/cramming.

6. Whether exempting VoIP providers from requirements otherwise applicable to traditional providers of voice telephony creates unfair competitive advantages or whether the introduction of competition via VoIP requires, in a future proceeding, modification of existing regulations to promote fair competition.
7. Whether the regulatory framework that governs the provision of VoIP should vary based on the particular market served. Specifically, some VoIP providers target large enterprise and some target residential customers seeking the equivalent of a "second line." Some VoIP services may be designed to be a complete replacement for conventional telephone service and others may not.
8. The costs and benefits of any regulatory framework that we might apply to VoIP providers.
9. To what extent, if any, would Commission regulation of VoIP providers serve the public interest.
10. Whether, in a future proceeding, the Commission should change the current system for financially supporting telecommunications universal service programs to prevent the erosion of revenues possible with the introduction of VoIP and other new technologies, and if so, how.
11. Whether the Commission should require VoIP providers to be subject to the current system of intercompany compensation arrangements or whether, in a future proceeding, the Commission should revise the current intercompany compensation arrangement scheme

Scoping Memo: We here announce preliminary determinations and scoping, as required by Rule 6(c)(2). This proceeding is preliminarily categorized as quasi-legislative. We see no need for evidentiary hearings, and will provide for the submission of written comments. Any interested party who believes that hearings are required shall make a request for hearings in their opening comments and indicate the nature of any evidence they would present were hearing to be held. Failure to make such a request in opening comments will be

deemed a waiver of any request for hearings. Comments will be submitted on the following schedule:

Persons shall indicate their intention of being interested parties by notifying the Commission's Process Office	On or before 20 days after the mailing date of this OII
Concurrent opening comments and requests for hearing filed and served	On or before 45 days after the mailing date of this OII
Concurrent reply comments filed and served.	On or before 75 days after the mailing date of this OII
Draft decision published for comment	On or before 90 after the due date for concurrent reply comments
Final decision issue by Commission	First commission meeting at least 30 days after the draft decision is published for comment

The scope of the investigation is to consider the questions set forth above.

The ex parte rules applicable to this proceeding shall be those set forth in Rule 7(d) of the Commission's Rules of Practice and Procedure (Rules). As a quasi-legislative proceeding, ex parte communications are allowed without restriction or reporting requirement.

We anticipate that this proceeding will be resolved on the schedule set forth above and in no event will it conclude later than 18 months after the issuance of the scoping memo in this investigation, pursuant to Public Utilities Code Section 1701.5.

The determination only as to category is appealable pursuant to Rule 6(c)(1).

Findings of Fact

1. In offering ubiquitous real-time, point-to-point voice service, VoIP competes with traditional providers of voice telephony, including ILECs, and cable telephony providers.

2. Incumbent local exchange carriers and cable operators have also deployed, or have announced plans to deploy, VoIP on a commercial basis to business and/or residential customers in the next few years.

3. VoIP delivers voice and other related services using IP technology. Voice using IP is a substitute for voice using traditional digital protocols, such as TDM.

4. Many VoIP transmissions interconnect with the PSTN and utilize telephone numbers.

5. VoIP requires a customer to have a high-speed connection to the Internet.

Conclusion of Law

We tentatively conclude that VoIP that is interconnected with the Public Switched Network qualifies as a public utility telecommunications service.

IT IS ORDERED that:

1. Any interested person may request inclusion in the service list for this order instituting investigation (OII) by sending a letter or an e-mail (noting the docket number in the subject line), not later than 20 days after the mailing date of this OII to the Commission's Process Office (process_office@cpuc.ca.gov) located at 505 Van Ness Avenue, San Francisco, California 94102, requesting that the person or representative's name be placed on the service list. The Process Office

will promptly create the service list and post it on the Commission's web site, www.cpuc.ca.gov as soon as is practicable.

2. Parties and the Commission may serve documents in this proceeding using the procedures in proposed new Rule 2.3.1 and proposed revised Rule 2.3, which are appended to this OII, and are encouraged to do so. Those parties not using the proposed new rules must serve their comments in accordance with our existing Rule 2.3. All documents must be filed with the Docket Office in accordance with Rules 2, 2.1, 2.2, 2.5, and 3. The Commission 's Rules of Practice and Procedure can be found at the Commission's web site www.cpuc.ca.gov.

3. Comments shall be filed in accordance with the schedule set forth in the body of this order. The Assigned Commissioner or the Assigned Administrative Law Judge may modify any of the dates, other than the requirement to complete this proceeding within 18 months, as appropriate for the proper conduct of the proceeding.

4. The ex parte rules applicable to this proceeding, unless modified by the Assigned Commissioner, shall be those set forth in Rule 7(d) which allows such communications without restriction or reporting requirement.

5. This OII shall be served on the following, serving a notice of availability containing a uniform resource locator hyperlink for this OII on all those for which e-mail addresses are available. All others shall be served by mailing a copy of the OII and its attachment:

a. All certificated carriers including incumbent local exchange carriers, competitive local exchange carriers and interexchange carriers and all registered wireless carriers.

b. All known providers of Voice Over Internet Protocol service in California who are identified by the Telecommunications Division and do not otherwise have a certificate of public convenience and necessity.

c. Consumer and other intervenor groups identified by the Commission's Public Advisor.

d. Parties in the following dockets:

Rulemaking (R.) 95-04-043/Investigation (I.) 95-04-044 (local competition) and R.03-04-003 (Senate Bill 1563, Advanced Telecommunications Technologies).

This order is effective today.

Dated February 11, 2004, at San Francisco, California.

MICHAEL R. PEEVEY
President
CARL W. WOOD
LORETTA M. LYNCH
GEOFFREY F. BROWN
SUSAN P. KENNEDY
Commissioners

I will file a concurrence.

/s/ SUSAN P. KENNEDY
Commissioner

Concurring Opinion of Commissioner Susan P. Kennedy: I support the initiation of this investigation. I cast this vote, however, with considerable reservation because I believe that the resolution, as drafted, prejudges the outcome of the investigation.

We have not taken any testimony or done any diligence on the matter, yet the resolution boldly states that we have "tentatively" concluded that VoIP service is telecommunication subject to our regulatory jurisdiction. I believe this statement is wrong, both as a matter of fact and as a matter of policy.

Factually, VoIP telephony is not one thing, but many. Some versions of VoIP telephony interconnect with the PSTN, others do not. Since it relies on the internet, it is unclear whether the service is a voice or data service, or whether it is an intrastate or interstate communication.

From a policy standpoint, and in the absence of a record, I fail to see how we can even tentatively conclude that interconnection with the PSTN is an appropriate regulatory threshold, or that all VoIP communications interconnect with the PSTN.

Despite these reservations, I vote for this resolution because I believe our investigation must proceed right away. California cannot afford to delay; we must acquire the information necessary to make intelligent policy decisions in this area. Internet telephony is arriving at breathtaking speed. With it, come policy implications for such things as universal service, telephone devices for the deaf, and other programs that are currently funded by fees imposed on regulated telephone service.

The challenge for us as regulators is to devise new mechanisms for guaranteeing the continuation of these valuable programs – without hampering the growth of this exciting new technology.

The advent of VoIP presents California with an opportunity to be a national leader in developing a model for telecommunications regulation in a new IP-world. I believe this OII can be the means to accomplish that goal, but only if we conduct the investigation in a truly open-minded and unbiased way, and let the chips fall where they may.

/s/ SUSAN P. KENNEDY
Susan P. Kennedy
Commissioner

Dated: February 11, 2004, San Francisco, California

Attachment
Penetration of VOIP by Date
Page 1

	Cumulative % VOIP penetration					
	2003	2004	2005	2006	2007	2008
VOIP Provider Entry	4%	8%	11%	14%	17%	19%
Cable & ILEC Entry 2005	4%	8%	16%	24%	32%	40%
Cable & ILEC Entry 2004	4%	12%	20%	28%	36%	43%

Conversion rates:

Cable/Residential	10	percent
ILEC/Residential	5	percent
ILEC/Business	10	percent

Assumption: No change in the number of effective residential or business access lines

Impact of IP Telephony on Universal Service Programs

Projected Dollar Impact by Fund in 2008

Subsidy Program	FY 03-04 Appropriation	2008 VOIP Impact
Total	$939	$183 to $407
• California High Cost Fund A (small LECs)	$ 62	$12 to $27
• California High Cost Fund B (large LECs)	$522	$102 to $226
• Universal Lifeline Fund (Lifeline discount)	$246	$48 to $107
• Deaf & Disabled Telecommunications Fund (DDTP)	$ 69	$13 to $30
• California Teleconnect Fund (schools, community based organizations, libraries)	$ 40	$ 8 to $17

Note: The lower estimate of the impact occurs if providers are limited to Vonage capturing residential customers and ILECs converting business customers. The larger impact occurs if cable providers and ILECs enter the residential market as well.

Attachment
Page 3

Impact of IP Telephony on Universal Service Programs Looking Ahead Five Years to 2008

- Total impact on programs projected to be $183 to $407 million by 2008.
- Providers such as Vonage, 8X8, and Telverse entering the residential market now impact the public purpose programs by about $9 million in 2008. Continuing conversions of business lines by ILECs impact the programs then by about $174 million.
- Cable providers and ILECS entering the residential market in 2005, a date described as more likely by cable providers and ILECs, impact the funds by about $198 million in 2008. Continuing conversions of business lines by ILECs impact the programs then by about $174 million.
- Cable providers and ILECS entering the residential market in 2004, a date described as more likely by financial analysts, impact the funds by about $216 million in 2008. Continuing conversions of business lines by ILECs impact the programs then by about $174 million.
- Basic Assumptions
  - No change in the number of effective residential or business access lines
  - Based on industry and financial community sources, penetration rates are 10% for cable. 10% for ILEC business. and 5% for ILEC residential.

Million California Broadband Customers (includes, DSL, Cable, Other)

base year 2002	2003	2004	2005	2006	2007	2008	% growth rate
3.0	3.8	4.7	5.9	7.4	9.3	11.6	25
3.0	4.6	6.8	10.2	15.4	23.0	34.6	50
							yearly customer growth
3.0	3.8	4.6	5.4	6.2	7.0	7.8	800,000
3.0	4.0	5.0	6.0	7.0	8.0	9.0	1,000,000

Documentation, Comments

Base year level from FCC report on CA broadband subscribers
Growth rates developed from CPUC 3rd Report on Broadband (in draft)
49% DSL, 39% Cable, 12% other, CPUC 3rd report on broadband

Observed growth rates. Source: CPUC 3rd Report on Broadband (in draft)
SBC describing its own capacity, Bus. Comm. Review, June, 2000, pp. 14-16.
SBC install rate does not include "G.Lite", or customer-installed systems.

Scenario 1: No Market Entry by ILECs or Cable Providers

California VOIP Customers with No Cable or DSL Conversion (Broadband and Industry growth rates)

base year 2003	2004	2005	2006	2007	2008	% growth rate
30,000	37,500	46,875	58,594	73,242	91,553	25
30,000	45,000	67,500	101,250	151,875	227,813	50
30,000	60,000	120,000	240,000	480,000	960,000	100

Base year: see Estimation of California VOIP Users, below
VOIP uptake directly proportional to broadband growth; or, 1 percent of broadband users are VOIP users
Growth rate verbal estimate from industry source November 6, 2003.

VOIP % penetration at growth rate						
25	0.2%	0.3%	0.3%	0.4%	0.5%	0.6%
50	0.2%	0.3%	0.5%	0.7%	1.0%	1.6%
100	0.2%	0.4%	0.6%	1.6%	3.3%	6.6%

Scenario 2: Residential Market Entry by Cable Providers and ILECs in 2004

Conversion of California Cable customers to VOIP (millions)

2003	2004	2005	2006	2007	2008	% conversion rate to VOIP
7.1	0.23	0.5	0.8	1.2	1.6	5
Cable % VOIP penetration	2%	3%	6%	8%	11%	

Base year: total cable homes California. CA Cable & Telecom Assn, 2003 Western Show Announces..., 4/29/03
Conversion Rate: I65 Conversion applied to smallest of projected number of broadband customers. Rate compares with long distance capture rate by SBC in California market.

Conversion of California Large ILEC Residential Line Customers to VOIP (millions)

switched access lines 2002	2003	2004	2005	2006	2007	2008	% conversion rate to VOIP
15.2	14.6	14.0	13.4	12.8	12.1	11.4	2.5

Base year: CPUC data request for 3rd Report on Broadband; ILEC lose 4% access lines in 2003

ILEC Residential VOIP Lines (millions)

0.36	0.7	1.0	1.3	1.6	
ILEC % VOIP penetration	2%	5%	7%	9%	11%
Residential VOIP% penetration	**4%**	**8%**	**13%**	**17%**	**22%**
total effective residential lines	14.6	14.6	14.6	14.6	14.6	14.6

ILECs convert DSL and DSL-capable lines.
Conversion rate: total conversion rate to internet telephony is 7.5 percent per year, NJ.com (Star-Ledger) Making the call..., November 2, 2003, in a report from Atlantic-ACM, a Boston-based consultant. ILEC conversion rate is arithmetically one-half cable conversion rate.

assumes no change in the number of residential access lines

Scenario 3: Residential Market Entry by Cable Providers and ILECs in 2005

Conversion of California Cable customers to VOIP (millions)

2003	2004	2005	2006	2007	2008	% conversion rate to VOIP
7.1	7.1	0.27	0.6	0.9	1.3	5
% VOIP penetration		2%	4%	6%	9%	

Base year: total cable homes California. CA Cable & Telecom Assn, 2003 Western Show Announces..., 4/29/03
Conversion Rate: industry source, meeting with TD staff, October 9, 2003. Conversion applied to smallest of projected number of broadband customers. Rate compares with long distance capture rate by SBC in California market.

Conversion of California Large ILEC Residential Line Customers to VOIP (millions)

switched access lines 2002	2003	2004	2005	2006	2007	2008	% conversion rate to VOIP
15.2	14.6	14.6	14.0	13.3	12.6	11.9	2.5

Base year: CPUC data request for 3rd Report on Broadband; ILEC lose 4% access lines in 2003

ILEC Residential VOIP Lines (millions)

0.4	0.7	1.0	1.3	
ILEC % VOIP penetration	2%	5%	7%	9%

ILECs convert DSL and DSL-capable lines
Conversion rate: total conversion rate to internet telephony is 7.5 percent per year, NJ.com (Star-Ledger) Making the call..., November 2, 2003, in a report from Atlantic-ACM, a Boston-based consultant. ILEC conversion rate is arithmetically one-half cable conversion rate.

Residential VOIP% penetration			4%	9%	13%	18%	
total effective residential lines	14.6	14.6	14.6	14.6	14.6	14.6	assumes no change in the number of residential access lines

On-Going Conversion of California Large ILEC Business Line Customers to VOIP (millions)

switched access lines 2003	2003	2004	2005	2006	2007	2008	% conversion rate to VOIP
	8.7	8.3	7.9	7.5	7.1	6.8	5

Base year for VOIP business use: 10 percent of business systems have been replaced with a form of VOIP. Washington Post, Is it Phone or Internet..., October 26, 2003. 10 percent of all US phone calls are VOIP. Source: CNET, Internet Phone Providers..., October 8, 2003
Conversion rate: same as cable rate

ILEC Business VOIP Lines (millions)

	0.91	1.3	1.8	2.2	2.5	2.9	
total business effective lines	9.6	9.6	9.6	9.6	9.6	9.6	
Business VOIP% penetration							
of biz mkt	9%	14%	18%	22%	26%	30%	
of biz + rez mkt	4%	6%	7%	9%	10%	11.9%	
total all effective lines	24.2	24.2	24.2	24.2	24.2	24.2	Includes base level of business VOIP lines, but no change in the number of 'effective' business access lines

% VOIP penetration

	2003	2004	2005	2006	2007	2008	residential	
VOIP Provider Entry	4%	6%	6%	9%	11%	13%	0.94%	residential pct estimated using penetration middle value 1.6% for 2008
Cable & ILEC Entry 2005	4%	6%	10%	14%	19%	23%	11%	
Cable & ILEC Entry 2004	4%	8%	12%	16%	21%	25%	12%	

Conversion rates:

Cable/Residential	5	percent
ILEC/Residential	2.5	percent
ILEC/Business	5	percent

Assumption: No change in the number of effective residential or business access lines

Estimation of California VOIP Users

300,000	VOIP users in North America. Source: Net2Phone website, May 2003
19.8	million broadband users in US. Source: Broadband Internet Access in OECD Countries: A Comparative Analysis, October 2003, Pacific. 4.
3.7	million broadband users in Canada. Source: do
23.5	total broadband users North America
0.84	ratio of US to North American broadand users
252,766	US voip users: *use 250,000*
250,000	number of US VOIP users. Source: CNET, California to Regulate VOIP Providers, September 30, 2003
1.3%	percent of broadband users with VOIP; *use 1 percent*
30,350	VOIP users in California. *Use 30,000 in 2003*

(END OF ATTACHMENT)

Appendix A

Draft Amendments to CPUC Rules of Practice and Procedure in Order Instituting Rulemaking 04-01-005

2.3. (Rule 2.3) Service

(a) Except as otherwise provided in these rules or applicable statute, service of a document may be effected by delivering a copy of the document, ~~or~~ mailing a copy of the document by~~;~~ first-class mail, or making service by electronic mail as provided in Rule 2.3.1 to each person whose name is on the official service list or applicable special service list, to the assigned administrative law judge, and to any other person required to be served by statute, by Commission rule or order, or by the administrative law judge. Delivery may be made by handing a copy of the document to the person or leaving it in a place where the person may reasonably be expected to obtain actual and timely receipt. Service by mail is complete when the document is deposited in the mail. Service by electronic mail is complete when the electronic mail message is transmitted, subject to Rule 2.3.1(e). The administrative law judge may require more expeditious service or a particular form of service in appropriate circumstances.

(b) ~~With the prior consent of the party being served or at the direction of the administrative law judge, service may be made by facsimile transmission, by modem, or by other electronic means. Such service is complete upon successful transmission.~~

In the event that service cannot be completed by any of the methods described in Rule 2.3(a), the administrative law judge may direct or any party may consent to service by other means not listed in Rule 2.3(a) (e.g., facsimile transmission).

(c) ~~If a document, including attachments, exceeds 75 pages or with the permission of the administrative law judge, parties may serve a Notice of Availability in lieu of all or part of the document. (The original document and copies filed with the Commission, however, must be complete (see Rule 2.5).) A copy of the complete document must be served on any party who has previously informed the serving party of its desire to receive a complete copy. The Notice of Availability must comply with Rule 2.1(a) and must state the document's exact title and summarize its contents. The Notice must state that a copy of the document will be served at the request of the party receiving the notice and must state the name, telephone number, and facsimile transmission number, if any, of the person to whom such requests should be directed. The party sending the Notice must serve any party making such request within one business day after receipt of the request.~~

Appendix A

Draft Amendments to CPUC Rules of Practice and Procedure in Order Instituting Rulemaking 04-01-005

A party may serve and file a Notice of Availability in lieu of all or part of the document to be served. A copy of the complete document must, however, be served on any party who has previously informed the serving party of its desire to receive a complete copy. The original document and copies filed with the Commission must be complete (see Rule 2.5). A separate Notice must be provided for each document to be served, unless the assigned commissioner or administrative law judge authorizes a Notice to include reference to more than one document. The Notice must comply with Rule 2.1(a) and, if relevant, 2.3.1 and must state the document's exact title and summarize its contents. The Notice must state that a copy of the document will be served at the request of the party receiving the notice, and must state the name, telephone number, e-mail address, if any, and facsimile transmission number, if any, of the person to whom such requests should be directed. The party sending the Notice must serve any party making such request within one business day after receipt of the request. If a Notice of Availability is served by electronic mail in accordance with Rule 2.3.1, it must contain in its subject line the docket number of the proceeding and the words "notice of availability," followed by a brief identification of the document to be served.

(d) A Notice of Availability may be served and filed in any of the following circumstances:

(1) if a document, including attachments, exceeds 50 pages;

(2) if a document served by sending an e-mail message with the document attached in accordance with Rule 2.3.1(b) has attachments that are not readily reproducible in electronic format, would be too voluminous to attach to the e-mail message, or would be likely to cause e-mail service to fail for any other reason;

(3) if the document is served by making it available at a particular Uniform Resource Locator site (URL) on the World Wide Web. In this case, in addition to the requirements of subd. (c) of this Rule, the Notice must contain a complete and accurate hyperlink to the site at which the document to be served has been made available in a readily readable and downloadable form, and must state the date on which the document was made available at that site. Such a Notice may contain information about how to access or download the document to be served, or any other information required or allowed by the assigned commissioner or administrative law judge; it may not contain any attachments.

(4) with the prior permission of the assigned commissioner or administrative law judge.

(~~d~~e) A copy of the certificate of service must be attached to each copy of the document (or Notice of Availability) served and to each copy filed with the Commission. If a Notice of Availability is served, a copy of the Notice must also be attached to each copy of the document filed with the Commission. The certificate of service must state: (1) the exact title of the document served, (2) the place, date, and manner of service, and (3) the name of the person making the service. The certificate filed with the original of the document must be signed by the person making the service (see Rule 2.2(e)). The certificate filed with the original of the document must also include a list of the names, ~~and~~ addresses, and, where relevant, the e-mail addresses of the persons and entities served and must indicate whether they received the complete document or a Notice of Availability. (See Rule 88, Form No. 6.)

(~~e~~f) The Process Office shall maintain the official service list for each pending proceeding. It is the responsibility of each person or entity on the service list to provide a current mailing address and, if relevant, current e-mail address, to the Process Office for the official service list. A party may change its mailing address or e-mail address for service or its designation of a person for service by sending a ~~written~~ notice to the Process Office and serving a copy of the notice on each party on the official service list.

(~~f~~g) The administrative law judge may correct and make minor changes to the official service list and may revise the official service list to delete inactive parties. Before establishing a revised service list, the administrative law judge will give each person on the existing service list notice of the proposed revision and an opportunity to respond to the proposal.

(~~g~~h) The administrative law judge may establish a special service list for documents related to a portion of a proceeding. A special service list allows service to be made on only a portion of the official service list. A special service list may be established, for example, for one phase of a multi-phase proceeding or for documents related to issues that are of interest only to certain parties. Before any special service list is established, the administrative law judge will give each person on the official service list notice of the proposal to establish a special service list and an opportunity to show why that person should be included on the special service list or why a special service list should not be established.

Appendix A

Draft Amendments to CPUC Rules of Practice and Procedure in Order Instituting Rulemaking 04-01-005

2.3.1. (Rule 2.3.1) Service by Electronic Mail (E-Mail Service)

(a) E-mail service may be used in any proceeding which has been assigned a docket number.

(b) E-mail service may be made by sending the document to be served as an attachment to an e-mail message to any person or entity who has provided an e-mail address for the official service list; or by sending an e-mail Notice of Availability in accordance with Rule 2.3(c) and (d) to any person or entity who has provided an e-mail address for the official service list; or by any other method of e-mail service directed by the assigned commissioner or administrative law judge.

(c) When serving a document as an attachment to an e-mail message, the serving party must include in the subject line of the message the docket number of the proceeding and a brief identification of the document to be served, including the name of the serving party, and must include in the text of the message the electronic format of the document (e.g., PDF, Excel), and the name, telephone number, e-mail address, and facsimile transmission number of the person to whom problems with receipt of the document to be served should be directed. A separate e-mail message must be sent for each document to be served, unless the assigned commissioner or administrative law judge authorizes the attachment of more than one document to an e-mail message.

(d) By providing an e-mail address for the official service list in a proceeding, a person or entity consents to e-mail service in any proceeding in which the person or entity is on an official service list.

(e) By utilizing e-mail service, the serving party agrees, in the event of failure of e-mail service, to promptly serve the document by any means authorized by these rules, provided that e-mail service may be used only if (1) the receiving party consents to the re-use of e-mail service, or (2) the serving party determines that the cause of the failure of e-mail service has been rectified. "Failure of e-mail service" occurs when the serving party receives notification, in any manner, of non-receipt of an e-mail message, the receiving party's inability to open or download an attached document, or any other inability of the receiving party to access the document to be served. The serving party and receiving party may agree to any form of substitute service allowed by these rules.

(f) In addition to any other requirements of this rule, the serving party must provide a paper copy of all documents served by e-mail service to the assigned administrative law judge, unless the administrative law judge orders otherwise.

(g) The Commission may serve any document in a proceeding by e-mail service, except those documents for which another form of service is required by applicable statutes or these rules. .

(h) Nothing in this rule alters any of the rules governing filing of documents with the Commission.

(i) The assigned commissioner or administrative law judge may issue an order consistent with these rules to govern e-mail service in a particular proceeding.

(END OF APPENDIX A)